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Manual of  
MEAT INSPECTION PROCEDURES  
of the  
United States Department of Agriculture



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UNITED STATES DEPARTMENT OF AGRICULTURE  
CONSUMER AND MARKETING SERVICE  
MEAT INSPECTION





234451

This manual contains instructions on procedures to be used in carrying out the laws and regulations relating to Federal meat inspection. This material shall be regarded therefore as implementing the regulations contained in Subchapters A and D, Chapter III, Title 9 of the Code of Federal Regulations.

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PART 301 - DEFINITIONS

301.1      The definition for "animal" includes calves as well as older animals under the general heading "cattle."

PART 302 - SCOPE OF INSPECTION

302.1

A. The sale of meat and product to Federal Agencies (Army, Navy, V.A., etc.) is regarded as placing the establishment in the category of interstate business.

B. The Officer in Charge should report to the District Director those establishments in which no meat or meat food product is prepared and distributed in one of the following:

1. Transported in interstate or foreign commerce.
2. Shipped to other official establishments.
3. Sale to Government agencies.

302.2 The Officer in Charge may permit the slaughter of food animals such as buffalo, reindeer, and elk provided facilities are adequate and the handling of these animals does not represent a hazard to the meat products normally produced. These animals are not subject to inspection and are not eligible to bear the mark of Federal inspection. Under the provisions of Section 340, it is possible to use meat derived from this type of animal in some inspected product.

302.3

A. Slaughter and evisceration of poultry are permissible in an official establishment provided the facilities are adequate and there is no interference with the inspection. If a separate department is not provided for this purpose, the poultry slaughtering equipment may be in the same room with slaughtering equipment for cattle, calves, etc., but this activity should not be permitted in rooms where exposed meat or product is being prepared, handled, or stored.

B. Poultry products, including egg products other than shell eggs, intended for use as ingredients of meat food products are acceptable when identified as having been inspected for wholesomeness by the U. S. Department of Agriculture and when found to be sound and otherwise acceptable when presented as an ingredient. This would apply not only to egg products used in the preparation of meat food products but also to those used in federally inspected establishments to prepare nonmeat food items which would subsequently be used in an inspected meat food product. For those nonmeat items containing egg products which are not prepared in an inspected establishment and which are intended to be used as ingredients of meat food products, it will be required that the manufacturer certify that the egg products used were inspected for wholesomeness by the U. S. Department of Agriculture.

The acceptability of shell eggs will be determined by the inspector at the time of use. Also, the fact that poultry products have been inspected for wholesomeness when produced does not relieve the meat inspector of the responsibility of assuring that these products are acceptable when used in establishments under his supervision.

Poultry products that have not been inspected for wholesomeness by the U. S. Department of Agriculture shall not be used in the preparation of meat food products.

302.4    The boning of wholesale cuts does not constitute processing within the meaning of Section 302.1 of the Regulations. Wholesale cuts boned elsewhere than in an official establishment should be so handled that at least one mark of inspection remains legible on each piece of meat if the product is to move further in interstate or foreign commerce or if it is to be admitted into an official establishment. Grinding or chopping of meat is regarded as processing within the meaning of Section 302.1.

302.5    Each inspector is charged with responsibility to notify his official superior regarding operations affecting inspection in the establishment or parts of the establishment to which he is assigned.



PART 304 - APPLICATIONS FOR INSPECTION OR EXEMPTION:  
RETAIL BUTCHERS, RETAIL DEALERS, AND FARMERS

304.1 Applications for inspection on Form MI-401 should be forwarded in duplicate to the Director, Processed Meat Inspection Division, Washington, D. C. If approved and inspection is granted, one copy will be returned to the Officer in Charge for his files.

The inspector should bear in mind that the applicant for inspection signs the following statement before inspection is granted:

"If inspection is granted under this application, it is hereby expressly agreed to conform strictly to all Federal regulations and orders pertaining to meat inspection as they apply to the within-mentioned plant, and it is guaranteed that said plant will be maintained in a sanitary condition and that adequate equipment and facilities for conducting Federal inspection and operating the plant will be provided and maintained."

304.2 The original copy of the application for a certificate of exemption from inspection should be forwarded through the Officer in Charge to the Washington office. The application is made on Form MI-417-3. Comments of the Officer in Charge regarding the business of the applicant and the suitability of the applicant's plant are made on the same form, and supplemented, if necessary, by letter from the Officer in Charge.

304.3 To obtain a certificate of exemption from Federal meat inspection, which will permit the holder thereof to ship or transport interstate meat and meat food products not bearing the mark of Federal inspection, it is necessary that the applicant be a "retail butcher" or a "retail dealer" as defined in the Meat Inspection Act.

This means that insofar as his meat business is concerned, he is engaged chiefly in selling meat or meat products to consumers only. It is also necessary that he meet applicable regulatory requirements.

A. A certificate of exemption authorizes a "retail butcher" or a "retail dealer" to ship or transport interstate each week to consumers and meat retailers, but not to wholesalers, dressed carcasses or fresh meat therefrom not bearing the mark of Federal inspection in an amount not in excess of that stated in the Meat Inspection Act and Regulations. It also authorizes him to ship or transport to consumers only products other than fresh meat; that is, meat and meat food products which have been salted, cured, canned, prepared as sausage, lard, or other meat food products not bearing the mark of Federal meat inspection. By "consumers" is meant families, hotels, restaurants, clubs, and the like, who utilize the meat or product in the preparation of meals or lunches on their premises.

B. If the applicant disposes of meat food products of a kind likely to be eaten without cooking in the home or other place of consumption and which contain pork muscle tissue, the product or the pork muscle ingredient thereof must be treated to destroy possible live trichinae in accordance with

one of the methods prescribed in Section 318.10 of the Federal Meat Inspection Regulations. Also, his place must meet the sanitary requirements set out in Section 308.3.

C. No nuisance, such as fly-breeding places, rat infestation, cockroach infestation, rubbish heaps, decomposing animal material, polluted water supply, unsanitary drainage disposal and leaking floors, is allowed on the premises of an exempted establishment. These requirements are included in the printed matter at the bottom of the application, and signing the application constitutes an agreement to comply with the Regulations.

D. Horse meat or a horse meat product may not be prepared, handled, or stored in an establishment operating under a certificate of exemption from inspection.

304.4 The application should be made out in the exact name desired on the certificate of exemption.

304.5 Nonfederally inspected "chip" steaks and hamburger are meat food products and can be shipped interstate to consumers only under a certificate of exemption. They are not considered fresh meat.

304.6 All establishments issued a certificate of exemption will be assigned to an official Circuit for periodic review. The Officer in Charge shall arrange for a review of the business and premises of retail meat dealers assigned to his Circuit at least once each six months unless other arrangements for review have been made by the Director, Processed Meat Inspection Division. In addition to the specific requirements outlined in the Meat Inspection Regulations, the following factors should be considered in making this routine review:

A. The name and location should be the same as on the official certificate; ownership same as on the application, if available.

B. The reviewing inspector shall ascertain that the meat business is still classified as retail in character; more than 50 percent of the volume or amount of the meat sales must be directly to consumers (consumers for this purpose include families, hotels, and restaurants). In making this determination, the total overall business of the applicant both within the state where the business is located and the interstate business must be taken into consideration. If there is any doubt as to whether the business should be classified as retail in character, it is the meat dealer's responsibility to furnish the necessary substantiating information, such as his books or sales slips.

C. The reviewing inspector shall inquire as to whether the proper shipper's certificates, as required by Section 325.10 of the Regulations, are being executed for all interstate shipments of unmarked product. The type of interstate shipment should be reviewed; fresh meat not bearing the marks of inspection may be shipped interstate to consumers and to other retail stores within the limits prescribed in paragraph 21 of the Meat Inspection Act. A review of the sales slips should be made on interstate shipments of nonfederally inspected meat food products to be certain that such products are being



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shipped to consumers only and not to retail stores for resale.

D. If at all possible, the reviewing inspector shall check the accuracy of the records maintained by the dealer by visiting one or more of his interstate customers and checking the volume of sales and type of product being shipped.

E. The premises should be checked for sanitation compliance in accordance with Section 308.3 of the Regulations.

F. Each type of meat food product to be shipped interstate under the certificate of exemption must be checked for compliance with all applicable parts of the Regulations; i.e., labeling, the use of preservatives, added substances in smoked meats, added substances in cured beef products, and sausage requirements.

Laboratory samples shall be taken with a request for whatever specific information is desired.

G. Retail meat dealers operating under a certificate of exemption may not refer to the U. S. Department of Agriculture, Meat Inspection Program, or to a certificate of exemption number on their labels or containers. These references are often misinterpreted to refer to inspection, when in fact, these establishments are exempt from Federal meat inspection.

H. Form MI-417-6, Quarterly Report of Volume of Business Compliance and Sanitation Inspection of Retail Meat Dealer Holding Exemption Certificate, shall be carefully completed during each visit to an exempted establishment. The report should be forwarded to the Processed Meat Inspection Division, attention Staff Officer for Special Services. The company management should be notified in writing of discrepancies when they are found and a copy forwarded to the Washington office. Failure to comply with the Regulations and any change in firm name or location should be reported promptly. Exemption certificates that are no longer required by holders thereof should be recovered and forwarded to the Washington office with appropriate comments.

304.7 Whenever a new application for inspection or for a certificate of exemption from inspection is necessary because of a change of ownership, change of name, change in form of organization, or change in location, the effective date of the change should be specified either on the application or in an accompanying letter. An application for Federal meat inspection or exemption from inspection and the grant of inspection and issuance of a certificate of exemption serve to identify the party that is to be held responsible for the maintenance of satisfactory conditions and compliance with the Meat Inspection Regulations at the establishment. A change in ownership must be recorded with the Processed Meat Inspection Division as soon as practicable. Either the management of the establishment or the Officer in Charge may inform the Processed Meat Inspection Division of any change in this connection.

The three usual types of parties involved in grants of inspection or exemption therefrom are an individual, a partnership, or a corporation. When the



business of an individual is purchased or otherwise transferred to another party, the change in management calls for a new application by the new management. When there is a change in partnership involving any of the partners, the result is a new partnership and a new application is required. So long as a corporation as originally incorporated continues in control of an establishment, changes in the ownership of the shares of the corporation or a change of officers do not effect a change in the identity of the party (the corporation) in control of the establishment, and a new application is not necessary.

A. If a new corporation is formed to take the place of the one to which inspection is granted, a new application is required.

B. If the business of an individual or a partnership is taken over by a corporation, a new application is required.

C. If a corporation is liquidated and the assets are taken over by an individual, a partnership, or another corporation, a new application is required.

The control of the establishment, as mentioned above, has reference to the control of the business on the premises without reference to the ownership of the premises, which may be vested in another party altogether, in which case the party controlling the business at the establishment usually exercises authority over the premises by virtue of a lease from the owner.

When there is to be a change in the ownership at an establishment that requires a new application for inspection, it should be accompanied with a request from the management holding the current grant for withdrawal of inspection which is in its name. The date on which the transfer is to take effect should be given.

304.8 Information giving the name of each tenant operating in an official establishment, the scope of his operations, and a description of the part of the premises which he occupies should be forwarded in writing by a responsible official of the firm to which inspection has been granted, through the Officer in Charge, to the Technical Services Division. Information covering changes with respect to the status of such tenants should also be forwarded in a like manner. The owner or operator of the official establishment holding the grant of inspection is responsible for all operations in the establishment, including those of the tenant insofar as they affect the maintenance of inspection.

304.9 When drawings of proposed remodeling or new construction are presented for approval in accordance with Section 304.2 of the Regulations, they should be forwarded through the Officer in Charge. He should determine whether it is fully informative for proper evaluation of the proposal. The Officer in Charge should determine whether or not the proposal complies with inspection requirements. Full use should be made of the sample drawings and specifications contained in the Agriculture Handbook No. 191, U. S. Inspected Meat Packing Plants.

## Section 304.9

If changes are needed, the Officer in Charge should have them made before sending the drawings to the Technical Services Division. If these changes cannot be agreed upon locally, the Officer in Charge should forward the drawings to the Technical Services Division with his comment and recommendations. In the event drawings are received without such information from the Officer in Charge, they may be returned.

If the drawings amend or supersede previously approved drawings, the sheet or job number or both, and the date of approval should be given in the letter of transmittal.

The following procedures outline the responsibilities of Officers in Charge with respect to: Surveying proposed establishments to determine compliance with approved drawings and specifications and general readiness for inspection; surveillance of construction at official establishments involving plant enlargement or remodeling projects to assure compliance with approved drawings; and reporting the results of such surveys and observations to the District office.

Each Officer in Charge having the responsibility for determining whether a proposed establishment or additions to or alterations at existing inspected plants are in conformity with approved blueprints and specifications should supply himself with at least the following:

1. A good scale rule for assistance in interpreting the drawings.
2. An accurate tape measure (preferably metal) for taking exact measurements of floor areas, rail heights, door widths, etc.
3. A soft colored pencil for noting deficiencies or deviations on the drawings.
4. A good light meter for accurately determining the footcandles of lighting provided in various places in the project.

The foregoing articles may be borrowed from the plant if they are not otherwise readily available.

A. Before beginning the survey of a proposed plant or department, the inspector himself should carefully read the specifications accompanying the drawings and become at least reasonably familiar with the general floor plan arrangements and other important features such as rail heights and type of ventilation illustrated in the blueprints. He should keep in mind that some of the most important standards to be met are often included only in the specifications. These include such items as the screening of windows, details of potable water supply and sewage disposal systems, trapping of floor drains, and construction of equipment.

Inspectors surveying projects should become thoroughly familiar with the various materials used in constructing establishments and with the different kinds of finishes of floors, walls, and ceilings in order to make a determination that the construction is strictly in compliance with the approved drawings and specifications.

Inspectors should also assure themselves that they fully understand the various symbols used by draftsmen to indicate such details as windows, doors, overhead rails, refrigeration units, skylights, supporting columns, and floor drains. The inspector can obtain assistance in a proper interpretation at most plants from engineers or other personnel.

B. In conducting the survey, inspectors must check for conformity with drawings by actually measuring important items such as ceilings and rail heights; spacing of operations in slaughtering department; door widths; distances between a plumb line from overhead rails and adjacent foot platforms, columns, or walls; and spacing of fixed pieces of equipment in relation to the wall.

Location of floor drains and the pitch of floors toward the drains; number, type, and location of hand-washing facilities (including liquid soap; individual towels, and used towel receptacles); and hot and cold water hose connections should be carefully noted and checked against the drawings and specifications as should the type and location of all major pieces of equipment.

The facilities in the employees' welfare rooms and the inspector's office should be examined and a determination made as to whether they are as illustrated or described in the drawings and specifications and whether the facilities are adequate for the number of employees at the plant.

The adequacy of ventilation in all nonrefrigerated work areas and welfare rooms as well as the adequacy of the facilities for maintaining refrigerated work spaces at the temperature designated on the drawings should be determined.

It should be definitely established whether the water supply is adequate in volume and properly distributed in the plant. In those places requiring hot water at a specific temperature, a check should be made to see if such requirements can actually be fulfilled.

The outside premises should be examined to determine if such items as hard surfaced roadways; paved vehicular areas; paved, drained, and curbed livestock pens (equipped with suspect pens and squeeze gate, artificial lighting, cleanup hose connections, etc.); paved areas around catchbasins; and the like conform to the approved drawings and specifications.

Obviously the above does not cover all points to be considered in the course of a survey but is intended as a reminder of some of the more important aspects. The foundation for the proper conduct of operations and inspection is a properly constructed and equipped plant, and Officers in Charge must give adequate attention to surveys in order to assure that proper facilities are provided.

C. The inspector should keep a good set of notes regarding the deficiencies or deviations. After completing the examination of the project, the inspector should make a full written report to the company regarding such items, listing specifically and in detail those changes and/or additions required before the facilities will be accepted. The plant should inform the Officer in Charge when the corrections have been completed so that another survey can be made. A copy of the inspector's report should be forwarded to the Technical Services Division and to the District Director.



## Section 304.9(C)

In new plants, recommendations for inauguration of inspection should not be made until the plant is in conformity with the drawings and specifications and is otherwise ready for the inspection. Recommendations for inauguration of inspection should always include certification by the Officer in Charge that the plant is substantially in conformity with the approved drawings in all important respects. A statement should also be made that letters are in the possession of the Officer in Charge from the public health authority in the area certifying that the potable water supply meets the standards of the U. S. Public Health Service and that the plant sewage system is acceptable. Such letters should not be forwarded to the Washington office, but should be kept in the Circuit file for the plant.

The use of new or remodeled departments should not be allowed until the facilities are in accord with the approved plans in all important respects.

If certain minor deficiencies from the approved drawings and specifications are noted, such as a slight relocation of a lavatory, hot and cold water hose connections, or a piece of equipment that does not interfere in any way with the efficient utilization of the facility, the proper conduct of inspection, or the proper sanitary maintenance of the department, Officers in Charge may accept such deviations at their own discretion. All other items of non-conformity must be corrected or cleared with the Technical Services Division before acceptance.

When proposed plants are being readied for inspection or when major enlargements of existing plants involving a probable increase in production or inspection requirements are under construction, Officers in Charge should work out with the District Director plans for furnishing the necessary inspection personnel.

At the time Officers in Charge recommend inauguration of inspection at a new establishment, a statement should be made regarding the number of additional personnel required to perform inspection duties in the new facilities and whether or not arrangements have been completed for supplying sufficient inspectors to fill the new positions.

304.10 Approved drawings that are five years old for plants in which inspection has not been begun are deemed out of date. The Officer in Charge should ask the owners for a letter relative to the disposition to be made of the drawings (return or destruction). A copy of the reply should be sent to the Technical Services Division. If the drawings are to be returned, this may be done without further instructions from Washington after obliteration of the marks of approval. This same procedure should be applied to drawings that have been on file five years after withdrawal of inspection.

304.11 Officers in Charge should review blueprints at least yearly to make certain that only active sets are maintained. When projects have been completed, the Technical Services Division should be notified promptly by Form MI-423. When approved drawings are superseded, they should be removed from the files and destroyed.

304.12 When blueprint files contain numerous paster drawings, the Officer in Charge should request the establishments to provide blueprints or drawings incorporating all the information contained in the various paster drawings so that the old drawings may be removed from the files.

304.13 When projects have been abandoned, the action indicated for projects five years old should be taken immediately and reported to the Technical Services Division on Form MI-423.

304.14 The Officer in Charge should be sure that blueprints of drawings submitted for approval are in strict accordance with instructions contained on pages 2 and 3 of the booklet, U. S. Inspected Meat Packing Plants. However, if the revision consists of paster drawings and the management of the establishment is unable to submit his previously approved master drawing, the Circuit copy should be forwarded with a request that it be returned after microfilming.

These requirements are waived for plants for which inspection is pending since drawings are not microfilmed until after inspection is inaugurated.

304.15 When inspection is inaugurated at an establishment, the management and their employees are usually unfamiliar with the Meat Inspection Regulations and operating procedures of the program. They require additional guidance and supervision; therefore, arrangements should be made to provide additional inspection coverage so that effective application of the program is achieved as soon as possible. The necessary coverage will vary considerably between stations and between establishments; therefore, it will be left to the discretion of the Officer in Charge and the District Director as to how much additional coverage is needed and for how long it should be provided.

PART 305 - OFFICIAL NUMBERS AND INAUGURATION  
OF INSPECTION

305.1 The Officer in Charge should advise the District Director whenever operations are suspended at an establishment. This report should include the reasons for, and length of, the inactivity if obtainable, and the disposition of inspection personnel. If the establishment is inoperative for a sufficient period of time, a letter of suspension of inspection will be executed by the District Director. When advised of this action, the Officer in Charge should make a review of the establishment and make a written report of conditions requiring correction before inspection is reinstated. A copy of his findings should be given to establishment management and the District Director.

305.2 The grant of inspection is forwarded to the Officer in Charge; he or a subordinate should deliver the grant to a responsible official of the establishment.

305.3 It is imperative that Officers in Charge report immediately to their District Director any emergency at the Circuit, such as strike, flood, or fire, which might result in a work stoppage. The report should be made in accordance with the requirements in C&MS Instruction 305-5.



## PART 306 - ASSIGNMENT OF DIVISION EMPLOYEE

306.1 Access to a federally inspected meat packing establishment is a right guaranteed to those inspectors assigned to that establishment. This also applies to those other places such as docks and warehouses where inspection is performed. Persons other than assigned inspectors must be regarded as visitors and are admitted when it is acceptable to plant management.

306.2 The official badge should be worn over the left breast on the outer clothing of each employee assigned to ante-mortem, post-mortem inspection and the supervision of processing operations while these duties are being performed. The keys that are issued to the inspector should be kept on his person at all times. Badges or keys becoming unservicable, lost or damaged should be immediately reported to the supervisor and handled in accordance with C&MS Instruction 262-1.

PART 307 - FACILITIES FOR INSPECTION

307.1 "Due Notice" to the Officer in Charge regarding shipment of product from an official establishment will be worked out locally according to the needs of the establishment as well as that of the inspection service. When the Officer in Charge knows that the operating practices at an establishment meet acceptable standards, he may permit shipping and receiving of U. S. Inspected and Passed product during hours when an inspector is not on duty, subject to occasional unannounced checks. He may permit breaking of carcasses into quarters or primal cuts each bearing the mark of inspection. Unmarked product should be packaged and labels bearing the marks of inspection applied only while an inspector is on duty.

307.2 Supervisory inspectors will advise employees on matters relative to personal safety and the control and prevention of accidents. Division employees are not expected to initiate safety programs involving the employees of official establishments, but Division employees in supervisory capacities should include attention to safety factors when giving advice to establishments concerning plant facilities.

307.3 Information on equipment and facilities for the sanitary conduct of operations and inspection should be obtained from the pamphlet, "U. S. Inspected Meat Packing Plants."

## PART 308 - SANITATION

308.1

A. Officers in Charge are expected to assure that potable water from an approved supply is used in edible products departments and in associated areas.

B. Before the water supply is accepted, full consideration should be given to its source and the distribution system within the plant.

1. Generally, water from an approved public supply may be regarded as acceptable as delivered to the establishment. However, it should be sampled annually to check on possible contamination after delivery to the establishment.

2. When the establishment uses a private water supply, a report on the bacterial quality of the water taken inside the plant should be required at least every six months or at any other time the inspector has reason to question the condition of the water. The report should cover an examination of water, taken at a location specified by the inspector and examined by the local health agency having jurisdiction over the water supply in the area at the request of the establishment.

C. Water may become nonpotable as it is distributed in the plant. Therefore, inspectors should give regular attention to the condition of all storage facilities and pipelines in the establishment. Hazards such as dead ends of pipelines, improper cross connections between potable and nonpotable water and the absence of anti-back siphonage devices should be eliminated. Where use of nonpotable water is permitted for certain purposes, its use must be accompanied by adequate safeguards to assure that it cannot possibly come in contact with edible product or pollute the potable water supply.

308.2

A. Control over the use of cleaners, sanitizers, water treatment compounds, pesticides, hog scalds, tripe denuders, and sewage and offal chemicals will be handled by the inspector at the time of delivery of these materials into the plant. These labeled materials must be shown in the "List of Chemical Compounds" booklet. Materials which are not listed should be rejected unless the seller or establishment has a letter of approval from the Laboratory Branch of the Technical Services Division. Approval letters are intended to permit use of materials accepted during the interim between revisions of the booklet. Therefore, letters dated prior to the date of the current booklet should not be honored.

The procedure for getting compounds approved is shown on page 3 of the booklet.



## Section 308.2(A)

The appearance of a compound in the booklet is assurance that it is chemically acceptable for use as indicated. The practical use of it is the responsibility of the inspector.

If there is any question concerning a material listed in the booklet, a sample of it should be sent to the Laboratory Branch, Technical Services Division, Consumer and Marketing Service, U. S. Department of Agriculture, Box 348, Beltsville, Maryland 20705.

Materials such as paints, lubricants, and other miscellaneous preparations which are not listed in the booklet and which do not belong in categories A to Z may be used provided the inspector has sufficient information to assure safety and usefulness of them. If such information is not available, samples should be submitted to the appropriate laboratory.

B. Sanitizing agents must not be used as a substitute for thorough and effective cleaning. Residues must be removed from edible product equipment by thorough rinsing with clean water before the equipment is again used for handling product. However, residues of the compounds need not be washed from floors, walls, and ceilings unless, in the judgment of the Officer in Charge, the presence of such residues is objectionable.

The strength of the solution of quarternary ammonium compounds customarily used does not exceed one ounce of the 10 percent aqueous solution, or one-tenth ounce of the dry chemical to four gallons of water. Avoid bringing the concentrated solution or the dry chemical into contact with the eyes or nasal passages because of the extremely irritating effect on mucous membranes. Solutions of sodium hypochlorite and chloramine customarily used do not contain more than one-half of one percent available chlorine (5,000 parts per million).

Solutions containing approximately 50 ppm of chlorine, iodine, or quarternary ammonium compounds may be used as a rinse, after washing, for the hands of employees handling meat food product. Solutions containing approximately 200 ppm of chlorine, iodine, or quarternary ammonium compounds may be applied to equipment which comes in contact with meat or meat food product. It will not be necessary to remove product from the room when these solutions are used but care should be taken to avoid contact with the product. Equipment should be rinsed with clear water following the use of such solutions. However, rinsing of employees' hands should not be required. Sodium hypochlorite and Iodophors (aqueous solutions of iodine and certain types of nonionic wetting agents) may be used to produce the chlorine and iodine, respectively.

Use of the sanitizing material should not be permitted to interfere with thorough washing and cleaning of equipment and employees' hands whenever necessary. The beneficial effects of using a sanitizing solution will not be obtained unless the area used is thoroughly cleaned.

Preparations of quarternary ammonium compounds and those of high available chlorine content, such as HTH, chloramine T, dichloramine T, and chlorinated cyanuric acid, should not be stored or used together since such handling may cause fires.

308.3 Elimination and destruction of insects and rodents in and around meat packing plants is vital to good sanitation. Two principles should be followed: Prevent their breeding; and prevent their entrance into establishments. In nearly all cases the owners of adjoining properties and the local health authorities will cooperate in developing a program for insect and rodent control. The management should obtain such cooperation. Any place that will afford food, water, and a hiding place is a potential source of pests. The most common places are manure piles, trash piles, garbage dumps, accumulations of paunch and stomach contents, and hog hair. Regulations do not permit such accumulations on the premises of official establishments. The cooperation of the local health authorities should be solicited by the management in eliminating such breeding places from the vicinity of meat packing plants.

Buildings and equipment that harbor pests should be repaired or replaced so as to eliminate breeding and hiding places. Walls, floors, and ceilings that have been tunneled by rodents should be replaced with rodent-proof material, such as concrete or brick. Tunnels may be blocked with 17 gauge hardware cloth, glass, metal, or other rodent-proof material. Stone and brick walls should have the joints pointed up flush and smooth, and all cracks, crevices, and openings around pipes, etc., should be sealed tight. Walls, ceilings, and partitions should be of tight-fitting material that will not permit the entrance or hiding of cockroaches and other pests. Floor drain strainers should be in good repair and should remain in place so as to prevent the entrance of rats through drainage lines. Dressing rooms and lunch rooms should be equipped and maintained so as to eliminate any breeding or hiding places.

Lockers should be examined regularly by the management and inspectors to see that they are kept clean and free from pests. Overcrowding (more than one person to a locker) should not be permitted, since it is difficult to keep overcrowded lockers clean and free from cockroaches. Dry storage rooms should be kept neat and clean. The stored material should be arranged so that as the supplies are moved the area can be thoroughly cleaned. Most dry stores can be placed on racks having a clearance of at least 12 inches from the floor and so arranged that the floor beneath the racks can be readily cleaned. If racks are not used, the dry stores should be closely piled so as to eliminate any possibility of runways or harborage for rodents. All openings that may admit rodents, birds, flies, and other pests should be effectively screened.

When pests do gain entrance to official establishments in spite of vigorous attempts to keep them out, certain eradication methods are permitted. This is an indication that the preventive measures have not been entirely successful and the management and inspectors should determine where they have failed and act to prevent a recurrence. It takes ingenuity to cope with all of the various kinds of insects and rodents. The goal of complete eradication of pests in official establishments is definitely possible and this goal should be attained.



308.4 Following is a description of permitted methods for the control of insects and rodents by the use of chemicals:

A. Fumigants.

1. Hydrocyanic Acid Gas. Fumigation with this gas is effective for most types of insects and rodents. Since this gas is extremely poisonous to man as well as to insects and rodents, permission for its use must first be obtained from the Officer in Charge and a competent, experienced person must be placed in direct charge of operations. Certain foods absorb the gas; therefore, when foods other than meat are to be exposed, prior permission for the fumigation should be obtained from the local health authorities. Exposed meats or packaged meats need not be removed from the rooms being fumigated. After fumigation the rooms should be well ventilated and tested by a skilled fumigator before inspectors or workmen enter the rooms. Ventilation must also be sufficient to assure complete removal of the gas from the surface of food products. Hydrocyanic acid gas may also be employed to eradicate mites, skippers, ham beetles, and the like from infested hams and similar products. Follow this by removal and condemnation of infested meat.

When liquid hydrocyanic acid is used, the equipment for releasing the gas should be so constructed and controlled as to positively prevent any of the liquid hydrocyanic acid from contaminating any product, and only the gas should be permitted to escape from the fumigating equipment.

2. Methyl Bromide Gas. Fumigation with this gas is permitted on the same basis and with the same restrictions as were set forth for hydrocyanic acid gas.

B. Insect Sprays.

1. Warning! Sprays containing some of the organic thiocyanates are quite toxic to animals and man, and when absorbed through the skin, ingested, or inhaled may cause serious illness. It is therefore considered wise for employees engaged in this work to wear properly designed masks to prevent inhaling the spray and clothing that will prevent contact of the chemical with the skin.

2. The residual action of DDT, chlordane, lindane, malathion, and more concentrated solutions of some other insecticides is usually effective against flies and the use of these solutions around the outer premises and inedible products departments has been satisfactory. A liberal application of these preparations on fences, the walls of the scale houses, inedible products loading docks, boiler rooms and the like, affords opportunity for flies attracted to the establishment to come in contact with the insecticide material and be killed before they can enter edible products departments. By contrast with this satisfactory use of insecticides, their application to walls, ceilings, and equipment in rooms where exposed meat or product is handled should not be permitted. The deposit of insecticide cannot be readily removed and continues to act rather slowly against flies or other insects which when overcome or killed may fall into the product. As the action of the



insecticide is continuous, there is no practical way to protect the exposed product from contamination with dead insects. Therefore, the use of these insecticides is limited to places where exposed meat is not handled.

3. So-called "knockdown" sprays containing pyrethrum or allethrin do not have a residual killing action and may be used in places where exposed meat is to be handled according to the restrictions outlined above. As these insecticides act very quickly, it is possible to kill all the flies in the room and with a minimum of labor wash down the excess insecticide and any flies that have been killed, before exposed meat is brought into the room. This use of the "knockdown" sprays, in addition to the application of residual insecticides in the manner already outlined, should control flies on premises that are kept clean and free of fly-breeding places.

4. The use of one and one-half fluid ounces of emulsifiable 50 percent strength malathion added to five pounds of granulated sugar and thoroughly mixed with a small amount of coloring (blue or green) to give a distinctive color to the mixture is a very satisfactory bait material around livestock pens and inedible departments of official establishments. Care should be taken to place the bait so that it cannot be ingested by livestock.

5. Colored sugar baits (blue or green) containing one to two percent of either Diazinon or Dipterex have also been used effectively for fly control in these areas.

6. Deodorized kerosene solutions of pyrethrins or allethrins or a combination of the two containing not more than one percent of piperonyl butoxide may be used in the form of an aerosol in all departments, in accordance with the restrictions applicable to pyrethrum extracts.

7. Solutions containing more than one percent of piperonyl butoxide, N-propyl isome, and N-octyl dicycloheptane dicarboximide (MGK 264) and solutions of chlordane, lindane, methoxychlor, and malathion with or without other approved insecticides may be used with the limitation applicable to DDT; that is, outside edible products departments.

8. Allethrin is acceptable on the same basis as pyrethrin, that is, in deodorized kerosene solution or other approved carrier.

9. N-propyl isome is acceptable on the same basis as piperonyl butoxide.

10. N-octyl dicycloheptane dicarboximide (MGK 264) is acceptable on the same basis as piperonyl butoxide.

11. Insect repellents containing di-n-butyl succinate as the active ingredient are effective around loading docks, door and window facings, and similar areas of official establishments.

C. Insect Powders.

1. Any of the dry insecticidal compounds listed when mixed with dry inert material are acceptable for use as an insect powder in accordance with the restrictions applicable to the same insecticide when used in insect sprays.

2. Sodium fluoride, powdered pyrethrum, rotenone, borax and boric acid, and powders containing organic thiocyanates or DDT in an inert base may be used for the elimination of cockroaches under the same restrictions governing the use of sprays. With the exception of powders that possess a definite brown color, all powders shall be definitely colored blue or green.

D. Rodent Baits.

1. Anticoagulants. Rodent baits composed of Warfarin, Pival, Fumarin, Diphacin, PMP, or Prolin and cracked cereal grains or blue or green colored cereal or other vegetable meals or flours may be used in edible departments provided the layout has been approved by the Officer in Charge and the bait is contained in boxes plainly marked "RODENT BAIT." For proper adherence, cracked cereal grains should be thoroughly mixed with enough melted animal or vegetable oil to lightly coat each particle before the addition of the anticoagulant. This will require approximately two ounces of oil to five pounds of grain. Each bait box will be marked with a serial number and the name of the firm or individual responsible for the rodent control. Bait boxes will be so constructed that all sides, top and bottom are capable of being closed and fastened leaving only openings for the free entrance and exit of rodents. Aqueous solutions of anticoagulants may be used in drinking fountains similar to those used in the poultry industry provided the solution is colored green and the fountain marked and used in bait boxes of the same type and markings as described above. Bait boxes and bait boxes containing fountains for dispensing dry and liquid anticoagulants may be allowed to remain continuously in departments having a dry cleanup so long as the need exists and the box does not become a nuisance. Bait boxes placed in areas having a wet cleanup must be placed after the cleanup and removed to an acceptable dry area prior to the beginning of operations. Anticoagulants produce internal hemorrhages in rodents and other warm-blooded animals and must be eaten over a period of 2 to 10 days to produce a lethal effect. The physiological action of these chemicals is similar to that of the dicumarol widely used in medicine as an anticoagulant for blood. It must be remembered that bait boxes within the building of an establishment are a means of eliminating rodents as opposed to controlling rodents. Control should be accomplished by rodent proofing buildings and maintaining a rodent-free zone around buildings.

2. Red Squill. This substance mixed with proper bait is highly toxic to rats. Baits shall not be placed in edible products departments until after operations have been ended for the day. All uneaten baits must be gathered up and destroyed before operations are begun the next day. Baits must not be placed in dry salt cellars. They may be placed in other departments containing exposed meats, but care must be taken that they are so placed as to prevent contamination of the meat.

3. Tracking Powders and Sticky Boards. Tracking powders colored blue or green and sticky boards, may be used in departments having a dry cleanup, provided there is no exposed product in the department. Sticky boards may also be used in departments having a wet cleanup, provided there is no exposed product and that the sticky boards are placed after the cleanup and removed prior to beginning of operations. Neither tracking powder or sticky boards shall be used in a manner to create a nuisance.

308.5 Storage and Use of Insecticides and Rodenticides. Insecticides and rodenticides when stored in official establishments shall be in a location acceptable to the Officer in Charge and shall be under the supervision of a responsible establishment employee. When used by an establishment employee, the use including preparation and placing of baits must be under the direct supervision of a Program inspector. When used by other than an establishment employee, these materials shall be used only by pest control operators licensed by the state in which they operate. No condition that may be a source of danger to human health or that is not consistent with proper sanitation or inspection should be permitted to develop.

308.6 Personnel—Dress—Conduct. Program employees must not smoke while on duty or while in rooms where meat or meat product is prepared or handled. Establishment employees must not be permitted to smoke while working with exposed product. If the management of the establishment has restrictions pertaining to smoking, such requirements should also be observed by Program employees.

308.7 Spitting on the floor should be prohibited.

308.8 All employees working in departments where exposed product is handled should wear head coverings to prevent hair from falling into the product.

308.9 Leather aprons, wrist guards, and the like used as safety devices for employees engaged in cutting or boning meat must be maintained in a clean and sanitary manner. To assist in maintaining leather aprons in satisfactory condition, a clean, washable cloth covering may be worn over the apron.

308.10 Wearing of badges, identification cards, campaign buttons, and similar articles on outer clothing by persons who handle products should be discouraged. However, similar articles necessarily worn must be so attached that their accidental inclusion in product will be definitely precluded.

308.11 Contaminants—Foreign Material. Magnetic traps have been found effective in removing iron particles from chopped meat products. They should not be used as a substitute for proper inspection procedures.

308.12 The following possible sources of contamination are given to aid inspectors in carrying out their responsibility to prevent contamination of product:



## Section 308.12(A)

A. The edges of shovels should be ground as often as necessary to prevent the rolling edges from crumbling into product. Cast alloy shovels made of the softer metals require close attention.

B. Staples from metal stitching machines represent a dangerous source of contamination. Operation of the machines near open containers of product should not be permitted. Metal-stapled containers and wirebound boxes of product should be opened with great care.

C. Metal tag fasteners used to apply numbered identification tags in the slaughtering departments should be removed after they have served their purpose. Other metal tag fasteners, tags, wood and metal skewers, etc., should be completely removed from carcasses prior to cutting or boning. Tag fasteners that cannot be readily removed from the meat should not be permitted.

D. Care should be exercised in opening slack barrels and other containers closed with nails to see that nails and wood splinters do not enter the product.

E. Attaching paper or burlap barrel covers by means of small staples is not permitted.

F. Worn can openers, metal cut by friction, broken or worn parts of equipment, wire used to suspend overhead equipment, loose hooks on cooler racks, metal strapping from fiber containers, and broken wire from bacon hangers and belly spreaders are all sources of metal contamination which should be given careful attention.

G. Staining of product through contact or friction with aluminum can largely be avoided by the use of anodized aluminum hooks, rails, pipes, and sheets. The anodic coating may erode in time and anodizing becomes necessary to prevent contamination of product. Use of hard metal hooks, such as galvanized iron or stainless steel or aluminum rails may cause abrading of the rail surface and deposit of small particles of metal on the product.

H. Fine wire brushes or steel wool should not be used on product, or on equipment that will come in contact with product.

I. Metal trucks and equipment that have been welded should be carefully examined to see that they are free from metal beads and pieces of slag before being used.

J. Frequent examination must be made of multiple needle pickle-injecting equipment. When a needle is missing from the device, a diligent search must be made until the broken needle is located or accounted for.

K. Enamelware is not acceptable.

L. Unprotected light bulbs should not be suspended directly over choppers, grinders, mixers, and similar equipment. Burned out light bulbs should be placed in rubbish containers immediately on removal from the

electric fixture. Special care should be given to the disposal of fluorescent tubes which may contain a poisonous gas. Such tubes should not be broken in an edible products department of the establishment. Milk, beverage, and other glass bottles should not be permitted in processing departments. Broken or cracked window panes should be repaired promptly.

M.       Scaling paint, dust, and flaking rust must be scraped from overhead structures in edible products departments. Condensation should not be permitted. Condensation can be effectively controlled by circulation of heated air in nonrefrigerated rooms. In coolers, insulation of walls or ceilings or the application of heat by means of very small steam lines near the ceiling will control condensation without seriously interfering with refrigeration.

N.       Inspectors should assure themselves that containers and coverings for product, including metal lard drums which may have a coating on their inner surface, are acceptable for use. Slack barrels and similar containers should be carefully examined for wood splinters and lined with suitable material to avoid contamination with splinters. When paper is used to line containers, it should not disintegrate when in contact with meat and juices. All paper adhering to the outer surface of frozen blocks of meat should be removed before the blocks are cut. In some cases, copper coated staples have been used in fiber containers. When in contact with meat, these staples cause a green discoloration which should be removed prior to use of the product.

O.       In opening burlap or muslin-covered slack barrels care should be taken to completely remove the cloth covering before puncturing the protective paper covering under the cloth.

P.       Cloth, paper, or other containers of meat products or of ingredients such as sugar or spice should be dumped in such a manner that lint or dirt on the outer surface will not contaminate the product.

Q.       Sawdust should not be used on benches or equipment or on floors in areas where operations such as grinding, boning, or cutting are being done. Sawdust used on floors of coolers must be clean and free from objectionable odors and should be replaced daily. Only a very thin covering should be used.

R.       Walls or posts constructed of masonry materials should be protected by suitable guardrails.

S.       In some elevator shafts moisture from the threshold of the floor above frequently falls into the trucks of meat being moved on or off the elevator at the lower levels. A method devised to eliminate this condition has proved very satisfactory. A channel is first cut into the vertical face of the floor support pitched to the corner of the shaft. Then a gutter of heavy steel is attached in the opening with lag screws, and cemented in place. This gutter, being open, can be readily cleaned. It conveys all moisture to a pipe in the corner of the shaft which discharges into the drain in the pit.



T. All equipment in which lubricating grease or oil is used should be examined carefully to make sure that there is no possibility that the lubricating material may get into the product. Water forced under a linking machine becomes contaminated with the heavy lubricating machine grease that has dropped onto the table from the working parts of the machine. To prevent contamination of sausage by this grease and water combination, the linking machine may be placed in a stainless steel pan at least two inches deep. If the possibility of contamination of products by lubricants exists, the establishment should be required to take suitable corrective measures without delay.

U. The sprays in Jourdan-type cookers may be arranged so that water strikes the roller assembly of sausage cages or smoke trees and washes grease or oil down onto the product and into the water reservoir at the bottom. To correct this condition, the sprays may be lowered, or a splash shield may be placed on both sides of the rail and extended down from the top of the cabinet a sufficient distance to prevent the rollers from being sprayed with water.

V. Metals such as copper, cadmium, lead, and the like are not acceptable for use in the construction of containers, fittings, pins, and similar devices when such metal comes in contact with product.

W. Metal drums coated on the inner surface with lacquer or resin may be used for rendered fats provided the coating is smooth, odorless, hard, and does not peel or blister. The coating should be approved by the Laboratory Branch of the Technical Services Division before its use is permitted. Such approval is usually given only to the manufacturer, and then only after submission of a statement showing the chemical composition, intended use, method of application, action while in contact with water and fat, and any toxicological data deemed necessary.

X. Several types of machines used to overwrap cartons of product, such as sliced bacon, luncheon meat, frankfurters, etc., are designed in a manner requiring product in a carton to be conveyed beneath the heat sealing unit before the wrapper is applied. Inspectors should closely examine such equipment to determine if the construction permits product contamination. If so, the establishment should be required to install a removable rust-resistant metal tray just below the heat sealing unit.

308.13 Contaminants—Bacterial. The pusher bar of some frozen meat choppers feeds frozen blocks of meat to the chopping blade. There is a space of a quarter inch or more between the pusher bar and the bed of the chopper. The pusher bar should be removed at the close of a day's operation and thoroughly cleaned. It should be left unassembled and allowed to air overnight.

A. Sausage grinder plates of the so-called reversible type are constructed with removable bushings and sleeves. This permits the accumulation of a considerable amount of meat, fat, and meat juices on the inner surfaces of the various demountable parts during grinding operations. The parts must be completely demounted for cleaning daily.



B. The feeder screw of most meat grinders is cast, and the center consists of a hollow core. It is very important that close examination be made of such equipment to detect any crack, flaw, or faulty construction that would result in an unsanitary condition.

C. The hollow aluminum emptying plug in some silent cutters has a pan in the bottom and is held in place with small stove bolts seated in the body of the plug. At times, these become loose and disappear. Continued use of the chopper causes the meat juices and particles of meat to get into the plug proper. The pan can be removed leaving the opening which can then be properly cleaned. The packing nut at the top has a gasket and cap to keep grease out of products. To make this packing nut more secure, cap screws should be used and the thread ends drilled permitting them to be held in place by a wire; this eliminates any chance for metal to get into meat products.

D. Covers to clean-out openings of sausage stuffing machines should be removed at frequent intervals and the interior of the stuffers examined to determine the need for cleaning. The frequency with which the covers are removed and the interiors examined and cleaned depends on the kind of product handled. Particular attention should be given to the interior of stuffers. If particles of meat, fat, liquids, and the like are found, the gasket is worn, defective, or improperly adjusted and permits material to bypass the piston. When such a condition is found, the piston should be "pulled" in order that proper adjustment can be made and the gasket replaced if necessary.

The frequency with which pistons should be pulled depends largely on the condition found on the interior of the cylinder as observed through the clean-out openings and from the top when the piston is in the "down" or loading position. The kind and consistency of product for which the stuffer is used will have a bearing on the frequency of pulling the piston for thorough cleaning. Thus, a stuffer used for a more or less stiff and coarse product would not ordinarily need to have the piston pulled as often as a stuffer used for a soft or paste-like product, providing the gasket, piston, and cylinder walls are in good condition. When pistons are pulled, they should be examined for any appreciable degree of deterioration of the gaskets or any detached fragments that might find their way into product; accumulation and possible decomposition of product beneath the gasket or in the space between the piston and the cylinder wall; and any other unsanitary condition that might be present. Attention should also be given to a possible accumulation of product beneath the overhanging edge of the safety ring bolted to the top of the cylinder. Pistons consisting of two (upper and lower) pieces should likewise be given attention at the time they are removed from the cylinder to determine whether any product or material has found its way into their interior.

When compressed air is used to operate a stuffer or other edible processing equipment, an effective filter should be installed in the air intake so that only filtered air enters the compressor. The compressed air storage tank should be equipped with a drain so that accumulated oil and moisture can be drained away frequently. Water and oil traps should be installed in the air

lines between the compressed air storage tank and the stuffer. It is desirable that the spent air be exhausted outside the building so that fine particles of oil and moisture do not permeate the air in the sausage-stuffing department.

E. The stainless steel strips on the base of some bacon slicing machines do not fit tightly, and some fat and meat juices work their way under the strips and become sour or rancid. These strips can be removed and the area under them cleaned. The strips can then be welded to the base with a stainless steel weld which is ground smooth and polished. Also, the guide rod for the meat holder on some bacon slicing machines has a recessed area at one end in which a certain amount of fat and grease accumulates. The guide rod should be removed as often as necessary to maintain proper sanitation, and the recessed area should be properly cleaned daily.

F. The construction of gate valves used on the lower openings of edible rendering tanks permits passage of a considerable amount of meat tissues, bone fragments, fats, and the like into the valve bonnet. To assure sanitary maintenance of this type of gate valve, the inner parts of the bonnet must be flushed daily. Furthermore, the valves must be completely dismantled as often as necessary for thorough cleaning and inspection.

Several acceptable methods of installing openings into valve bonnets for daily flushing with hot water and/or steam have been devised. Combination steam and hot water lines may be permanently connected to the bonnets; however, if this is done, adequate precautions to prevent back-siphonage into the potable water supply are necessary. Gate valves used for the purpose described above should be provided with similar facilities for daily clean-out and a program of dismantling as often as necessary should be initiated without delay.

G. Expellers used in rendering of edible products must be cleaned thoroughly following use. All parts of this equipment should be accessible for cleaning and inspection. To accomplish this, it has been found necessary to require removal of the plates forming the barrel around the press worm. Also, demounting or providing clean-out and inspection openings in the feeding mechanism has been found necessary.

H. Disease transmitted through meat food products frequently originates from an infected meat handler. A wide range of communicable diseases and infections may be transmitted by food handlers to other employees and consumers through contaminated meat food products and careless handling practices. Boils, infected cuts and sore throats are sources of organisms which cause staphylococcal food intoxication, the most frequently reported type of food-borne disease.

308.14 Part 308.14 of the Meat Inspection Regulations identifies responsibility of operators of official establishments to see that no person who is affected with any disease in a communicable form works in any area of a packing establishment where there is likelihood of disease transmission. The operators of meat packing establishments are required to assume the



responsibility for prompt reporting of all suspect cases of communicable disease among their employees to local health authorities.

308.15      Equipment—Care, Reconditioning.

- A.      Properly equipped tables, sprays, and the like should be furnished wherever necessary for cleaning product that has accidentally become soiled.
- B.      Equipment should be provided for receiving trolleys gambrels, sticks, and smoke sticks for transfer to a suitably equipped place for cleaning before reuse.
- C.      Since ozone affects the sense of smell and also masks odors, thereby interfering with inspection, use of lamps or equipment that produce ozone in such quantity as to interfere with inspection is prohibited in official establishments other than in coolers set aside for the so-called quick aging of beef.
- D.      Unnecessary pipes, wires, strings, and other material should be removed and no trash should be allowed to accumulate.
- E.      Cutting boards should be as small as is practical for the purpose. Such boards should be kept smoothly planed and removed daily for cleaning on all surfaces.
- F.      Carcass shroud cloths should be thoroughly rinsed following washing to assure the removal of all soap or detergent compound.
- G.      Storage compartments of "snow ice," "flake ice," "pac-ice," and similar equipment should be lined with stainless steel or other rust-resisting metal. The metal should be of sufficient thickness to withstand repeated striking of a shovel without puncturing. Suitable perforated, rust-resisting, and removable metal drainage plates should be provided in the bottom of the ice storage compartment, and frequently inspected to assure their cleanliness. Some of the equipment used for the production of various forms of flaked ice is so constructed that the water resulting from the melted ice is collected in a space below the ice storage compartment. This water may not be used for the production of ice nor should it be permitted in potable water lines or supply. There is no objection to prechilling the water intended for the manufacture of ice by circulating it in closed coils submerged in the cold water beneath the storage compartment.
- H.      Corrosion of galvanized metal equipment may be prevented by frequent thorough cleaning followed by a light application of colorless, odorless, paraffin oil. Equipment that is to come in contact with product should be washed before it is used in order to remove excess oil.
- I.      Wooden secondhand containers that have been reconditioned prior to receipt at an establishment should not be accepted for use since it is impossible to give the inspection necessary to determine fitness for use as contemplated in Section 308.12(a) of the Meat Inspection Regulations. Wooden



containers are frequently used in industry for various chemicals and insecticides, some of which are highly poisonous. Containers previously used to hold food may contain vermin excreta and decomposed material consisting largely of food spoilage organisms and dangerous toxins. As the complete removal of dangerous substances cannot be accomplished with certainty from containers made of porous material such as wood, such containers that show evidence of dangerous contamination should be rejected.

J. Secondhand containers made of nonporous material, such as steel drums, may be reconditioned without prior inspection; however, inspectors should examine such containers very carefully to determine that effective cleaning and preparation for use has been accomplished. The inspection would include:

1. Wiping the inner surface of the container with a clean white cloth or towel to determine whether all former contents have been removed.

2. Looking for a spotted appearance of the inner surface which may be an indication that the new lining will not adhere over improperly cleaned old linings or rusty surfaces.

3. Looking for dents in chime and sides of drum. These areas should be free from damage that would interfere with satisfactory cleaning and inspection. In determining the acceptability of steel drums, inspectors should apply the usual product container requirements for cleanliness and absence of probable sources of contamination. The acceptability of the coating on the inner surface of any metal container can be determined by obtaining from the management the name of the lining material, name and address of the firm that applied the coating, and forwarding this information to the Laboratory Branch of the Technical Services Division, Washington, D. C.

K. Inspectors should give close attention to the reconditioning of wooden curing vats where such equipment is still used. After being emptied, the vats should be flushed with water and removed from the curing department. All splinters, blisters, badly discolored wood and ridges should be removed from the inner surface of the vat and a smooth clean inner surface should be obtained. The outer surface of the vat should be smooth with the hoops free from corrosion. Badly rusted hoops should be replaced with new galvanized or stainless steel hoops. After the inner and outer surfaces of the vat have been properly smoothed, it should be flushed with clean water and steam to remove particles of wood and dust. A suitable truck should be used for returning the vats to the curing department since rolling the vats on the floor results in contamination of the outer surface and top of the vat.

Paraffined paper cups have been used to close the bung hole of reclaimed or secondhand barrels and tierces to prevent contamination of the interior.

## PART 309 - ANTE-MORTEM INSPECTION

309.1 The purpose of ante-mortem inspection is to accept for human food only those animals that yield meat or meat food products that are healthful, safe from harmful chemical and drug residues and are consistent with the consumer's sense of decency. Achieving this purpose results in:

A. Removing from human food channels those animals having conditions undetectable on routine post-mortem inspection (chemical poisonings and diseases affecting the central nervous system).

B. Preventing unnecessary contamination of the slaughtering department by diseased animals.

C. Obtaining information on suspect animals for sound post-mortem carcass disposition.

D. Withholding from slaughter animals exhibiting abnormal conditions that make them unfit for human food.

309.2 Required Facilities and Equipment. An official establishment must furnish and adequately maintain the following facilities and equipment to enable the inspector to perform ante-mortem inspection on all animals presented for slaughter:

A. Covered chutes and properly identified chutes and pens for segregating suspect and condemned animals; squeeze gates, chutes, boxes, nose tongs, halters, and any other effective device for restraining animals requiring close examination.

B. Thermometers.

C. Area illumination--a minimum of 10 footcandles of light (measured at a point 3 feet above the floor) where ante-mortem inspection is performed in holding pens and alley areas; a minimum of 20 footcandles of light (measured at a point 3 feet above the floor) in suspect pens, chutes, and boxes.

D. Establishment employees designated by management for sorting, restraining, moving, and identifying animals.

E. Covered pens in sufficient numbers to facilitate ante-mortem inspection in inclement weather.

F. When the official establishment serves both as a slaughtering facility and a public stockyard, separate pens must be designated for animals presented for ante-mortem inspection and those destined for resale. Ante-mortem inspection should only be performed on animals identified for slaughter by the establishment.

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G. A walkway 48 inches or more above the pen floor with a 24-inch wide platform and equipped with a safety rail must be provided along the inside of the pen for ante-mortem inspection of horses.

### 309.3 Procedures for Animal Examination.

A. To detect abnormalities, animals should be examined from each side when still and in motion. At both times the animals should be as free from excitement as possible.

B. Animals showing symptoms of disease (central nervous symptoms, inability to react normally to stimuli, abnormal temperature, dyspnea, etc.) or other abnormal conditions (injuries, swelling, etc.) are to be separated and placed in designated pens for examination by a veterinarian. The phase of ante-mortem inspection which consists of identifying and segregating animals exhibiting abnormal conditions can be performed by a veterinary meat inspector or a trained meat inspector under the supervision of a veterinarian. Identification of U. S. Suspect swine must include the use of tattoos to maintain the identity of the animals through the dehairing equipment when such equipment is used.

C. The final disposition of an animal exhibiting an abnormal condition on ante-mortem inspection is to be made by a veterinarian. The disposition of the animal should be one of the following:

1. Release the animal for slaughter (examination reveals no evidence of disease or abnormal condition).

2. Identify the animal as a U. S. Suspect (symptoms are observed that are not judged serious enough to condemn the animal; observed symptoms must be brought to the attention of the slaughtering department's veterinary supervisor on Form MI-402-2).

3. Mark the animal as U. S. Condemned (where the history and/or symptoms indicate the presence of a disease entity or toxicity resulting from chemical or biological agents for which the Regulations require condemnation).

D. Condemned animals should be handled in one of two ways:

1. Promptly destroyed by establishment personnel and disposed of according to Part 314 of the Regulations.

2. Withheld from slaughter with the condemned animal placed in an acceptable pen and held for observation or treatment. With the agreement of local and/or Federal animal health officials, the animals can be transported to a location other than the official establishment. When an animal is condemned and handled according to procedure 2 and recovers or a required withdrawal time is met, the animal, if returned for slaughter, must be re-examined on ante-mortem inspection by a veterinary meat inspector and a disposition made as outlined in 1, 2 and 3 of Paragraph C.



E. An identification system of animals having received ante-mortem inspection and having been accepted for slaughter should be established. Animals are not to be removed from pens and sent to slaughter unless a report signed by the ante-mortem inspector certifying that inspection was performed is available to the final inspector prior to actual slaughter of the animal. The report should have as a minimum the following information: Date, species, number, description of the animals, hour of inspection, lot or pen number, and signature of the inspector performing ante-mortem inspection.

The pen card is to be delivered to the inspector assigned to the slaughtering operation immediately prior to or at the time the animals are driven into the establishment for slaughter. Continual comparison between the number of animals certified on the report and the number of animals slaughtered should be made throughout the day's kill to positively determine that all animals being slaughtered have received ante-mortem inspection. The ante-mortem inspection pen cards of each day's kill should be held at the establishment for thirty days. Modifications of this procedure to fit small, large, or unusual operations are acceptable provided they assure identification of all animals receiving inspection. Any modified system must be approved by the District Director. Supervisors should continually check the procedure to determine that the goal of ante-mortem identification of animals destined for slaughter is being met.

#### 309.4 Ante-Mortem Inspection of Cattle with Proteolytic Enzymes.

A. Only animals showing no symptoms of disease or other abnormal conditions are to be injected with an enzyme solution prior to slaughter.

B. A minimum of two minutes and a maximum of 30 minutes should lapse between the injection and the time the animal is slaughtered. Animals showing any reactions following the injection are to be held for examination by the veterinarian.

Some reaction symptoms are salivation and incoordination at the time of injection, dyspnea, blood tinged froth at nose and mouth, rapid pulse, edema and/or hyperemia of the throat area.

Veterinary meat inspectors may release the animal for slaughter after it is observed to be normal.

#### 309.5 Diseases and Conditions.

A. "Downers" are animals that are unable to stand or have abnormal changes in locomotion and should be withheld from slaughter for a period of 24 hours. After this period of time, if the animal is progressively weaker and/or the symptoms exhibited by the animals are more exaggerated, they should be marked as U. S. Condemned and handled according to Section 309.16 of the Regulations. These animals that are not condemned should be made a U. S. Suspect and the final disposition based on ante-mortem and post-mortem findings

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along with a histopathological examination of tissue specimens of heart, brain, liver, kidney, spleen, and all diseased tissues. An exception to this are those animals exhibiting symptoms which indicate recent trauma or a localized condition that mechanically impairs the animal's movement. Such animals can be sent to slaughter as a U. S. Suspect provided any required withholding periods relative to drugs and chemicals have been met. "Downers" showing symptoms of a disease entity for which condemnation is required by the Regulations are to be marked as U. S. Condemned on ante-mortem. "Downers" condemned on ante-mortem which are held for treatment or observation in lieu of immediate destruction should be isolated and placed in facilities reserved for this purpose.

B. Animals exhibiting symptoms of certain disease conditions in addition to the ones listed in the Regulations should be condemned on ante-mortem inspection. This includes symptoms of central nervous system disorders in which animals are showing either a depressed (drowsiness, weakness, or coma) or an exaggerated activity (licking, staggering, circling, muscular tremors, etc.) These symptoms of central nervous system disfunction could indicate one of the following disease conditions:

1. Sporadic bovine encephalomyelitis.
2. Infectious Thromboembolic Meningo - encephalitis.
3. Salt poisoning.
4. Metal poisoning.
5. Fluorine poisoning.
6. Chlorinated hydrocarbon pesticide poisonings.
7. Organo-phosphorus pesticide poisonings.
8. Plant poisonings.

C. Calves lacking in vigor and muscular coordination as determined by lethargy and inability to stand and walk normally shall not be slaughtered for human food. Calves, regardless of age, that are determined on ante-mortem inspection to be satisfactorily developed and show normal movements and show no symptoms of disease may be passed for slaughter without restriction.

D. Diseases and conditions requiring special handling are as follows:

1. Emergency Slaughter. The provisions in the Meat Inspection Regulations for emergency slaughter are not intended to cover the slaughter of sick or dying animals. Also, animals for which a required drug or chemical withholding period has not been observed are not acceptable under the emergency slaughter provisions.



2. Vesicular Diseases. When a vesicular condition is observed on ante-mortem inspection, the animals should be held under inspection supervision and the matter reported immediately by telephone to the nearest Animal Health Division officials. Federal and state officials in charge of animal disease control will make the final diagnosis and give instructions for the disposition of the affected animals and disinfection of the involved facilities.

3. Investigational Animals. Ante-mortem inspection is not to be performed on experimental or research animals unless authorization for slaughter is received from the Livestock Slaughter Inspection Division.

4. Tuberculin Reactors. Identification of tuberculin reactors includes making a record of the reactor numbers directly from the metal ear tags. When tags are missing from animals otherwise identified as reactors, an accurate description should be made on all reporting forms. This includes the estimated weight, presence or absence of brand marks on the jaw or elsewhere, presence or absence of horns, breed, color, marking and sex. A tuberculin reactor that had died from causes other than slaughter or that is condemned on ante-mortem inspection should be given a thorough post-mortem examination in the inedible products department.

5. Brucellosis Reactors. If a brucellosis reactor is condemned on ante-mortem, the proper information including the disposition of the animal should be forwarded to the Animal Health Division and state livestock sanitary officials. The identity of brucellosis reactors must be maintained to permit proper recording of the slaughter and disposition of the animal.

6. Licensed Biological Establishments. Upon request of the Animal Health Division, an inspector of the Meat Inspection Service may conduct ante-mortem inspection and supervise the final bleeding operations at a licensed biological establishment. The inspector will not supervise intermediate bleeding operations nor salvage exhausted animals. The inspector will check the records, ascertain that the ten days have elapsed after hyperimmunization, and otherwise determine that there is full compliance with Parts 309.7 and 310.16 of the Meat Inspection Regulations. The time incident to servicing these licensed establishments will be charged against the Animal Health Division. No charges will be made for supervision of the final bleeding operations if carried out within a federally inspected establishment.

7. Humane Handling. Inspectors should caution management of official establishments against animal handling practices that result in unnecessary pain or injury to the animals. If after calling attention to unnecessary cruelty or improper handling, prompt action is not taken to correct such practices, the Officer in Charge should report the circumstances to the local humane society office. The inspector should limit his actions designed to correct abuses to encouraging corrective action and reporting incidents of inhumane handling of the animals.



8. Animals exhibiting symptoms of a drug or chemical poisoning should be withheld from slaughter. The District Director should be immediately notified and given as much history as can be obtained on the animals--the clinical symptoms, number of animals, and other pertinent data. This same information should be relayed to the Livestock Slaughter Inspection Division. Animals exhibiting normal behavior on ante-mortem inspection but which have not met a required chemical or drug withholding period must be withheld from slaughter until the required withholding period has elapsed.

9. Control of Escaped Animals. All federally-inspected slaughtering establishments can use tranquilizer darts to control and handle escaped animals. The establishment must agree that it will (1) use a tranquilizer drug approved for use on food animals, and (2) hold animals dosed with an approved tranquilizer drug for the required withdrawal period before slaughter.

Approved tranquilizer drugs (trade names), the food animals on which they may be used, and the required withdrawal periods before slaughter are listed below:

DI QUEL	All food animals	24 hours
SPARINE	All food animals	72 hours
VETAME	Sheep	72 hours
	Cattle	48 hours
	Swine	6 days
TRANVET	Cattle only	72 hours

## PART 310 - POST-MORTEM INSPECTION

310.1 Inspectors assigned to post-mortem duties should observe the condition of rooms and equipment and the clothing of establishment employees to see that they are clean and that the equipment, including sterilizers, wash basins, and facilities for inspection, are in proper working order.

310.2 Each inspector performing post-mortem duties should constantly observe the maintenance and use of sterilizers and wash basins during the day and require that they be properly maintained and used.

310.3 Certain areas have been provided and set apart for the exclusive use of inspectors. Establishment employees must not be permitted to encroach on such places to the detriment of inspection work.

310.4 The method of tagging carcasses to indicate various conditions found on initial inspection may be varied, as directed by the Officer in Charge, according to local conditions. One method used with success at several stations is as follows:

- A. Tuberculosis: Tag on left belly.
- B. Slight cervical abscess: Tag low on right foreshank.
- C. Well marked or extensive cervical abscess: Tag in right axillary space.
- D. Cholera, septicemia, etc.: Tag on right belly.
- E. Any condition for which the carcass should not be opened, at least until it reaches the final room: Tag on median line.

For ready identification, the tags printed in black are sometimes used at the head inspection station, and tags printed in red are used at the viscera inspection station.

310.5 The brands "U. S. Condemned" and "U. S. Passed for Cooking" are to be used for marking carcasses and parts. Informal marks and tags should not be substituted for these brands.

310.6 Inspectors are expected and required to make such incisions or inspections as are essential to determine the presence, character, and extent of any condition that might have a bearing on the disposition of the carcass or any of its parts. However, unnecessary mutilation of carcasses or parts that ultimately may be passed for food, and, of course, the unjustified condemnation of carcasses or parts, must be avoided.

310.7 When making inspections of nodes or organs requiring the use of a knife, it is essential that the tissues be sliced in such a way that the

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exposed surfaces may be carefully examined. Hashing nodes by a hacking or chopping method which affords no opportunity to examine the cut surfaces is not acceptable.

310.8 The "final" inspector is the immediate supervisor of the slaughtering and related departments to which he is assigned. He is responsible for all matters pertaining to the inspection. This applies not only to the actual final inspection of retained carcasses but also to the sanitary condition of the premises, the condition and operation of equipment and the work of employees who may be under his supervision. Matters involving structural changes or improvements are generally taken up with the Officer in Charge or his designated assistant.

310.9 Post-mortem inspection of U.S. Suspects should not be performed until the ante-mortem findings have been received by the post-mortem inspector.

310.10 The routine (other than final inspection) post-mortem inspection of every carcass must include a general examination of the entire carcass (outer surfaces and exposed surfaces of cavities) and of the viscera, in accordance with the following:

### A. Cattle.

1. The methods employed in handling, stunning, shackling, and bleeding the animals should be observed. (The animals should be handled promptly). The area where the stunned animals are discharged from the knocking box should be kept clean and as dry as possible.

a. When captive bolt stunners of the penetrating type are used over the frontal region, pieces of skin, hair and bone are carried into the brain. When used at the base of the skull, they usually cause extensive hemorrhage in the area. This requires trimming of the neck after the carcass has been split. Proper disposition should be made of hemorrhagic tissue and of the brains that are contaminated with foreign material.

b. When lead or frangible-type bullets are used to stun animals with penetration of the cranial cavity, the brain shall not be saved for edible purposes.

2. When cattle are slaughtered by the "on-the-rail" method, the "rodding" of the esophagus should take place at the time the head is removed from the carcass. Then the esophagus should be effectively closed to prevent the escape of rumen contents. Cattle should be sufficiently far apart to prevent contamination of skinned parts of adjacent carcasses by skin or hide. The heads and corresponding carcasses should be identified by duplicate numbered tags applied by an establishment employee before the heads are removed. The heads should be removed in a manner to avoid soiling them with rumen contents. The skinned heads should not be permitted to come in contact with the floor. The horns and all pieces of hide should be removed with equipment that is sterilized



after use on each head. This must be done before the heads are washed. The washing of the heads should be done in compartments or areas which will control the splash of waste water. The nasal and oral cavities should be thoroughly flushed before washing all the outer surfaces of each head.

3. After the head has been placed on proper equipment (standard removable metal head loops or removable hooks that hold the heads by insertion into the foramen magnum) and the tongue suspended from the tissues adjacent to the hyoid bones (on-the-rail layouts), the inspector should carefully observe all surfaces of the head to detect abnormalities and should expose, incise and examine the mandibular, atlantal, (if present) suprathyroid, and parotid lymph nodes (two each).

4. Following inspection of the lymph nodes on conventional layouts, an establishment employee should detach the base of the tongue from the head so that the tongue hangs only by its anterior attachment at the symphysis of the mandible, thus giving access to the muscles of mastication. In establishments where it is feasible, the tongue may be dropped prior to lymph node incision. The complete head inspection is then performed in a single operation.

5. Prior to inspection the tongue shall be detached sufficiently from the head bones, by an employee of the establishment, to allow a proper inspection to be made of the internal muscles of mastication. These muscles shall be inspected after incising them in such manner as to split the muscles in a plane parallel with the lower jawbone. The masseter muscles also shall be incised, splitting the entire external layer between the outer and intermediate fasciae. (If preferred, the inspection of the parotid lymph nodes may be made at this time rather than as indicated above.) The inspector should also make a thorough visual and digital examination of the tongue. Ulcers, scar tissue, and the tonsils should be removed by an employee of the establishment under the direction of the inspector. Lesions resembling actinobacillosis or actinomycosis should be carefully examined by the inspector and incisions made, if necessary, to determine the character and extent of the lesions.

6. Inspection of the head should be completed before viscera inspection of the corresponding carcass is started.

7. After the head has been removed from the carcass and while the head is being cleaned and inspected, establishment employees place the carcass on the skinning bed (except in installations where this procedure is not used). Care must be taken to see that the area is acceptably clean before the carcass is lowered. The head skin must be so manipulated that the tissues of the neck will be protected from soilage and other precautions must be taken to prevent contamination of any of the meat of the carcass. This may be best accomplished by leaving the ears on the hind and head skins tied except in "kosher dressing." The front and hind feet are removed before any other incision is made in the carcass. In removing the front feet, care should be taken to expose as little

as possible of the tissues of the foreshank and leave a "tie" of the hide completely covering the shank as far down as possible toward the carpal articulation where the cut is made to remove the foot; or the feet may be removed by a single transverse incision through the hide and articulation. Care should be exercised when skinning animals by the on-the-rail type of dressing procedure so that the hide is always reflected away from the carcass starting with the hind shanks and proceeding downward. Lactating udders are removed at this point in such a manner as to prevent soilage of the carcass with udder contents. Any contamination from udder content must be immediately trimmed from the carcass. The supramammary lymph nodes should be left attached to the carcass until inspection is completed.

8. When establishment employees move the carcass from the skinning bed, they must use care to see that the exposed parts of the carcass are protected from contact with the floor or with fixed objects. The floor of this area shall be maintained in a clean and sanitary manner, after each carcass is handled. The dropping of the bung should be made part of the rumping operation. The perineal skin should be reflected laterally over the anus leaving the external sphincter muscle intact. The incision into the pelvic cavity to "ring" the bung should be made with a clean knife. The rectum is then tied in such a manner as to tie off the neck of the bladder. A tie must be made at the point where the small intestine leaves the stomach and at the point where the esophagus attaches to the paunch. At each of these two named points, two ties should be made about 4 inches apart with the contents being stripped from the intervening portion of the intestine or esophagus, respectively, before the second tie is made so that the tissues can be severed with a knife between the ties without any spillage of the contents. The hide over the tail should be pulled directly after "ripping." Procedures at variance with the above may be accepted if the purpose of the requirements is fully accomplished.

9. Over-all observation of the viscera and entire carcass, especially the body cavities, should be accomplished at the time of evisceration. To facilitate the examination, repeated incisions should be made of the right and left bronchial lymph nodes, the medial and posterior mediastinal lymph nodes and the portal lymph nodes. The preparation and inspection of hearts shall conform to one of the following methods.

a. The surface of the heart shall be examined, and a longitudinal incision made extending from base to apex through the wall of the left ventricle and the interventricular septum, after which the cut surfaces and the inner surfaces of the ventricles shall be examined.

b. After the external surface of the heart has been inspected, the organ shall be prepared for further inspection by an establishment employee severing its attachments and cutting through the interventricular septum and such other tissues as will permit him to evert the organ completely. The inspector shall then examine the interior surfaces and make not more than four deep lengthwise incisions into the muscles of the septum and left



ventricular wall, unless the presence of cysts is suspected, when more incisions shall be made. Under this method, care shall be taken not to cut completely through the walls of hearts to be passed without restriction. If necessary to maintain the identity of hearts, the establishment shall provide consecutively numbered tags and appropriately mark the carcasses and hearts.

c. Examination of the liver should include opening the large bile duct. This should be done very carefully as cutting through the duct into the liver tissue will interfere with the detection of the small lancet liver fluke. The incision should extend at least an inch through the bile duct dorsally and in the other direction as far as possible. The beef liver should be palpated on the entire parietal surface and within the area of the renal impression. Palpation should be accomplished by exerting sufficient pressure with the hand and fingers to be able to detect deep abscesses or cysts within the liver. The inspector is expected to palpate the parietal or curved surface and to observe the visceral and parietal surfaces of the lung. The mesenteric lymph nodes, and the paunch should be palpated or incised if necessary. The inspector must look at the exposed surface of the beef spleen. The junction of the rumen (paunch) with the reticulum (honey-comb) should be carefully palpated to determine whether there are abscesses at this point.

10. Inspection of dressed carcasses, in addition to observation of all surfaces of the carcass, must include close examination (and incision, if necessary) of the prescapular, prefemoral, superficial inguinal (supramammary), internal iliac, lumbar and renal lymph nodes, the region of the kidney, the pillars and flat portion of the diaphragm and kidney.

11. When lesions of actinomycosis are found in the head but not in the viscera, the incision of the body lymph nodes may be omitted. However, a careful survey of the carcass should be made, including palpation of the region of the body lymph nodes for the detection of possible abnormal conditions. The lateral, anterior and medial cervical lymph nodes shall be examined when lesions of actinomycosis are found in the viscera.

12. The post-mortem examination of cattle that have reacted to the tuberculin test should receive special attention in order to locate all lesions. Use the guide entitled, "Post-Mortem Inspection of Cattle Reacting to the Tuberculin Test," in conducting this phase of post-mortem examination. In addition to the U. S. Retained tag number, the identification of the animal should be indicated by the reactor tag number.

13. The fact that an animal has reacted to the test for brucellosis does not require special post-mortem technique. It need not be retained nor classed as a suspect unless cause other than the reaction to the brucellosis test requires such action.

14. Washing of carcasses should be deferred until bruises have been removed and inspection has been accomplished.



15. When evidence of cysticercosis is found in cattle, the final inspection of retained carcasses shall be as follows:

The external and internal muscles of mastication, the heart, and muscular portion of the diaphragm including its pillars, should be carefully and thoroughly sliced to insure the finding of all cysts. Prior to the inspection of the diaphragm its peritoneum shall be removed. The tongue shall be carefully inspected by palpation, and if the presence of cysts in the muscles of this organ is suspected, the tongue shall be thoroughly sliced and all parts closely examined for cysts. In addition to the foregoing, the muscles of the oesophagus, the exposed muscles, and cut muscular surfaces of the split carcass shall be examined. Incisions may be made to expose additional surfaces for examination, but unnecessary mutilation of carcasses which may be passed shall be avoided.

B. Hogs.

1. Inspectors assigned to head inspection are required to inspect hog carcasses to determine whether they have been properly cleaned. The establishment must properly clean hog carcasses before any opening is made for evisceration or dropping the head. Inspectors can assist the management of establishments in assuming this responsibility by pointing out many of the factors that influence satisfactory scalding, dehairing, and cleaning. Some of these factors are water circulation and temperature, number of carcasses, and time carcasses remain in the scalding tub; condition and operation of the dehairing machine, including the water temperature and number of carcasses through the machine. These factors may vary considerably in different installations and with the type of hogs slaughtered; however, when given adequate attention, there should be no difficulty in obtaining satisfactorily cleaned carcasses. The knife or other tool used to partly sever the head should be sterilized after each head is dropped. The carcass should be presented to the head inspector in such a way as to make the cervical lymph nodes readily available for inspection.

2. Both mandibular lymph nodes must be carefully sliced and the cut surfaces examined. Other lymph nodes should be incised for examination when necessary. Exposed muscle tissue should be observed for evidence of cysticercosis or for other abnormalities that might warrant retention of the carcass.

3. When necessary to prevent contamination of the carcass or viscera, the rectum must be tied before evisceration. Establishment employees should exercise care to prevent cutting of intestines and stomach. Carcasses contaminated by stomach or intestinal contents or bile must be thoroughly cleaned before being presented for inspection. Organs must also be cleaned before inspection. Those organs excessively contaminated shall be condemned.

4. Viscera inspection must include palpation of the mesenteric, portal, bronchial, and mediastinal lymph nodes. The swine viscera inspector must lay down his knife and hook before routine examination of the swine viscera. He is to palpate the entire mesenteric chain of lymph nodes. He is to palpate the bronchial, mediastinal, and portal lymph nodes and the parietal surface of the liver and to observe both sides of the liver. He is to pick up and look at the spleen. The inspector should observe the surfaces of the lung and palpate and observe the heart. When the carcass has been retained for tuberculosis, "pin-point nodes," or cervical abscesses, the splenic, portal, bronchial, mediastinal, and mesenteric lymph nodes, and the spleen must be incised for inspection, except when the character and extent of tuberculous lesions can be determined without incision. When they have been detected by palpation and visual examination, the incision of such nodes as a part of the final inspection is not required unless the final inspector considers it necessary.

5. The viscera inspector should observe the carcasses and insofar as possible, the methods establishment employees use in handling carcasses and parts.

6. The rail inspector must observe carefully all parts of the carcass. He should require that remnants of liver and lungs, bruises, wounds and other abnormalities be removed by an establishment employee. Care should be taken to detect parasitic infestations, particularly kidney worms (*Stephanurus dentatus*). The cut surfaces of hams, briskets and diaphragms should be observed for evidence of cysticercosis. Establishment employees are required to remove the remnants of spermatic cords, abscesses and bruises that may be present in ham facings.

7. An establishment employee should be required to remove all lymph node tissue from the necks of carcasses retained on account of cervical abscesses or tuberculosis. If slight abscessed heads are passed for food, a careful removal of the mandibular and adjacent nodes should also be required.

8. Inspectors performing the final inspection of hogs retained on account of tuberculosis must examine by incision all important body lymph nodes of such carcasses except as provided below:

- a. Incision of the body lymph nodes may be omitted provided careful inspection of the head and viscera shows no lesion other than those in the lymph nodes of the head and mesenteries.
- b. Incision of the prescapular node may be omitted provided careful inspection shows the prepectoral node and the thoracic pleura to be free of lesions.
- c. Incision of the prefemoral node may be omitted provided an examination of the superficial inguinal, sublumbar and iliac nodes shows them to be free of lesions.



9. Establishment employees are required to sterilize implements after their use on retained carcasses.

10. The necks of hog carcasses may be washed after removal of the leaf and scrap fat. The skimmings from the tank receiving the water from neck washing should not be used for edible purposes.

#### C. Calves.

1. Calf carcasses should be cleaned and dressed while they are suspended from an overhead rail.

2. The heads should be thoroughly washed and the cavities flushed in the same manner as cattle heads. Incisions for node inspections may be confined to the suprathyroid lymph node unless there is reason to believe that incisions should be made of the other nodes of the heads.

3. The viscera including the paunch and intestines must be presented for inspection. Viscera inspection should include palpation of the heart, lungs, parietal surface of liver and attached lymph nodes, kidneys, and iliac nodes, with any necessary incisions and a careful observation of remaining parts of the viscera. The inspector must run his hands down the back of each hide-on calf on both sides of the midline to detect grubs or dirt; raise the front legs and examine the hide in this region as often as necessary to assure proper cleaning.

4. The skins of bruised calves and those affected with grubs, lice and other skin conditions as well as those found unclean, must be removed as part of the dressing operations at the time of slaughter.

5. The adequacy of dressing and cooler facilities to accomplish sanitary handling of the carcass' viscera and parts, rather than the age of the animal as determined by its teeth or weight, should be considered when an establishment proposes to dress so-called large calves.

#### D. Sheep.

1. In order to prevent contamination of sheep heads, scalping operations should be delayed until the pelt has been loosened from the rest of the carcass. Horns should be removed at the time of scalping. Nasal and oral cavities should be flushed before heads are placed on workup tables or in chutes. Overall washing of sheep carcasses should be accomplished before any openings are made for inspection or evisceration.

2. Viscera inspection. The abdominal and thoracic viscera should be observed carefully, and the lungs and liver with related lymph nodes and the heart should be examined by palpation. The main bile duct should be opened and examined for parasites. Incision of the bile duct should be made by the eviscerator as part of the dressing operations.



3. Rail inspection. All parts of the carcass should be observed carefully and an examination made by palpation of the area above the popliteal lymph node, and the prefemoral, superficial inguinal (or supramammary), and prescapular lymph nodes. In palpating these nodes, with the exception of the popliteal, place each node in turn between the thumb and fingers, including as little as possible of the overlying fat and tissue. The inner surfaces of the pelvic, abdominal, and thoracic cavities should be observed.

4. Although the exposure and incision of the body nodes is neither necessary nor desirable as a general practice, such procedures should be followed when efficient palpation fails to establish beyond a reasonable doubt that the nodes are free from lesions of caseous lymphadenitis.

When incision of body nodes is necessary, care should be exercised to leave the nodes in situ and held by natural attachments.

5. The final inspector will, of course, make a thorough examination of retained carcasses and viscera. When caseous lymphadenitis is found, the final examination should include incision of the prefemoral, superficial inguinal (or supramammary), internal iliac, sublumbar, renal, prepectoral, prescapular and popliteal lymph nodes, and of the kidneys and other nodes if the conditions so indicate.

6. A common condition found seasonally in sheep is sometimes referred to as "wild oats" or "needle grass." When only a few carcasses are affected or the carcasses have only a few lesions of the condition, the foreign material should be removed as a part of the dressing operations in order to avoid extra inspection supervision. When larger lots of affected carcasses or ones extensively affected with the condition are encountered, the carcasses may be placed in the cooler for chilling prior to removal of the foreign material. Such carcasses must be segregated and held under circumstances that preclude any possibility of their being released before the foreign material has been removed.

#### E. Horses.

1. Loose hair can be controlled by spraying the bellies, legs, and feet with water prior to slaughter. Adequate measures should be taken to prevent contamination of carcasses and viscera with urine. Hide removal should be accomplished without the carcass contacting the floor or other fixed objects. The evisceration and splitting operation should be performed in such a manner that the carcass does not contact the floor.

2. Cervical inspection. The head, identified with the carcass by duplicate numbered tags, should be removed immediately after skinning. All hide and external ear canals should be excised prior to thorough washing and flushing of the nasal and oral cavities. Following this, the head should be placed on the inspection rack. The inspection should include a general visual examination of the head for cleanliness, palpation of the submaxillary and pharyngeal lymph nodes and guttural pouch with incision of the parts when

necessary to determine the nature and extent of any abnormality. The nasal septum and turbinate bones should be exposed and given careful examination. This can be accomplished by using one of the following methods or another method found to be satisfactory:

- a. Split the head lengthwise and cut the septum from its attachments.
- b. Cut through the nasal bones transversely with a cleaver at a point in line with the anterior end of the facial crest and pull the nasal bones downward.

The purpose of this inspection is primarily to detect glanders but polypi, rhinitis and sinusitis are also revealed. Horse tongues should be examined for tooth lacerations which must be excised. The dark stain frequently seen on the dorsal surface of horse tongues should be removed by excision. The muscles of mastication need not be incised for examination.

3. Viscera inspection. Palpate the bronchial and mediastinal lymph nodes and lungs and incise when abnormal conditions are found. The heart should be incised as for cattle and examined for endocarditis and melanosis. Palpate the portal lymph node, liver and spleen. Examine the liver carefully on both surfaces. Open the bile duct as for cattle in an examination for flukes. The rest of the viscera and body cavities should be carefully observed for any abnormality. When horse lungs are prepared as edible product, the usual inspection for foreign material in the bronchi should be given.

4. Rail inspection. Palpate the body lymph nodes and observe the carcass for abnormality. Encysted parasites may be found under the peritoneum on the inner abdominal walls. The spinous processes of the thoracic vertebrae in the withers region should be removed and this area as well as the poll carefully examined for fistula. Removal of the first two cervical vertebrae facilitates inspection of the poll area. Equipment used in splitting or cutting the withers and poll regions should be sterilized after each use. The examination for melanosis should be conducted carefully, giving particular attention to the axillary and subscapular space in white or gray horses or when melanosis is found elsewhere. Obviously, this requires that such areas be exposed to view by removing the overlying tissues (dropping the shoulder). The fat and tissues lining the pelvic cavity should be given careful attention, especially along the femoral artery in white and gray horses.

#### F. Viscera Separation.

Since the opportunities for contamination are great, and product is handled at temperatures conducive to bacterial growth, it is important that inspectors of viscera separation operations be especially alert to any condition adversely affecting the prompt, clean handling of warm offal products. The inspector should be thoroughly familiar with both product and handling procedures. It is of paramount importance to discourage excessive accumulation of any unworked product.



As a guide, various organs and products are listed below by species, along with conditions that require the attention of the inspector:

Beef Products	Condition
Cheeks -----	Contamination, Parasites, Cysts, Eosinophilic Myositis
Lips -----	Hair at angle of mouth, Sores, Tooth cuts, Infections, Contamination
Tongues -----	Foreign bodies, Hair, Tonsils, Pieces of hide, Contamination Hair Sores, Ulcers, Abscesses, Actinomycosis
Poll meat -----	Clumps of loose hair, Contamination, Bruises
Tails -----	Sections of hide, Contamination, Rectal mucosa, Hair
Livers -----	Abscesses, Carotenosis, Flukes, Cirrhosis, Echinococcus, Sawdust, Telangiectasis, Miscellaneous parasitic conditions
Lungs -----	All principal bronchi approximating lead pencil size and larger to be split and examined for ingesta, Abscesses, Contamination, Parasites, Melanosis, Miscellaneous infections
Paunches -----	To be emptied without contaminating the outer surface, All surfaces to be thoroughly cleaned, Parasites, Abscesses
Brains -----	Blood clots and bone splinters
Hearts -----	Cyst, Blood clots, Eosinophilic Myositis
Weasands -----	Cyst, Eosinophilic Myositis, Contamination

#### Pork Products

Ham Facings -----	Scar tissue with infection, Abscesses, Bruises, Hair, Scurf, Contamination, Spermatic cords
Hearts -----	To be opened completely and all blood clots removed
Kidneys -----	Cystic kidneys, Kidney Worms, Other abnormalities
Stomachs -----	Contamination, Removal of stomach worms, All stomachs to be treated as edible product. If unsplit, inner and outer surfaces of casings must be presented for inspection
Chitterlings -----	Free from fecal matter and contamination - both sides, Nodules, Excess fat to be removed, Ileocecal valve to be removed. If unsplit, inner and outer surfaces must be presented for inspection
Ruffle Fat -----	Thorn head worm, Small pieces of intestine, Intestinal contents, Lesions
Cheeks -----	Loose hair, Teeth marks, Broken teeth, Sections of ear tubes, Pieces of tonsil, Rosin
Brains -----	Bone splinters, Contamination
Feet -----	Interdigital tissue, Hair Toes, and Claws, Rosin Machine cuts
Spleens -----	Contamination, Parasitic conditions, Abnormalities
Crown (Bung)	
Fat -----	Hair, Sections of genital organs, Contamination
Livers -----	Parasitic lesions, Abscesses, Contamination
Weasand Meat -----	Contamination, Parasites, Must be split and washed
Ears, Snouts, Lips and Head Fats ---	Hair, Bruises, Scurf, Rosin, Rings, Ring holes



Heads Passed for

Cooking ----- Removal of all nodes, All product under control at all times

Tongues ----- Parts of tonsils, Contamination, Parasites

Note: Due to the difficulties encountered in the inspection of hog tongues, the following procedures are described in detail:

1. Many hog tongues are lacerated and soiled during and following the dressing operations. The mutilation is caused in large measure by the action of the beaters of the dehairing machine. When this condition exists, all lacerations and punctures in the tongues must be removed by excision. Stained mucous membranes must be removed by scalding. The trimming of tongues and removal of mucous membranes, when required, should be regarded as a part of the dressing operation.

Threadworms are found in tongues of hogs coming from most sections of the country. All hog tongues used as an ingredient in meat food products or shipped from the establishment labeled as "Pork Tongues" shall be scalded and the mucosa removed. This is the only practical method to assure freedom of this parasite in pork products.

Unscalded swine tongues may be shipped from an official establishment providing they are labeled 'Unscalded Pork Tongues,' but at no time will they be allowed to be used as an edible product in federally inspected establishments until they have been properly scalded and the mucosa removed.

2. The following two methods of inspecting pork tongues for abscesses have been developed:

METHOD NO. 1 - This method is applicable to hog tongues from sows, stags, and boars. An establishment employee should incise through the midline in the ventral surface of the base or fleshy part of the tongue. This incision need not extend through the dorsal surface. After the incision has been made, the entire tongue should be given a very careful and thorough palpation by establishment employees. A tongue found to contain an abscess may be trimmed to remove the abscess if it is encapsulated. The remainder of the tongue may be passed for food if not contaminated in the trimming process.

Inspectors assigned to supervise this part of the viscera separating operation should reinspect a sufficient number of tongues to ascertain that all abscesses are being eliminated. This reinspection should be made while the tongues are warm and should consist of a very careful palpation of each tongue examined.

METHOD NO. 2 - This method is not applicable to tongues from sows, stags, or boars. An establishment employee should carefully palpate each tongue promptly after removal from the hog's head. The disposition of tongues found to contain abscesses should be as described under Method No. 1. The meat inspectors supervising this operation should select approximately 10 percent of the tongues that have been passed by establishment employees and reinspect them by

thorough and careful palpation while the tongues are warm. If any abscesses are found on reinspection, all tongues prepared previously during the day by this method should be given sufficient reinspection including incising as in Method No. 1 if considered necessary to assure that no abscessed tongues are passed for food.

Since the effectiveness of palpation depends on the tissues being pliable, the importance of performing examination by establishment employees and reinspection by meat inspectors before the tongues become chilled and firm must be considered in establishing inspection routines.

#### Sheep Products

#### Condition

Tongues -----	Removal of tonsils, Lacerations, Abscesses, Hair sores, Contamination, Stained tongues to be scalded to remove mucous membranes
Cheeks -----	Ear tubes, Contamination, Pieces of wool
Livers -----	Parasites, Cystic conditions, Scar tissue, Abscesses, Flukes
Caul Fat -----	Bladder worms, Nodules, Abscesses, Contamination
Paunches -----	To be emptied without contaminating the outer surface, All surfaces to be thoroughly cleaned, Abscesses, Parasites
Ruffle Fat -----	Pieces of small intestines, Contamination, Abscesses, Parasites
Lungs -----	Nodular parasites, Abscesses, Melanosis, Abdominal tissue, All principal bronchi to be split (pencil size and larger), Inspection for contamination of bronchi by ingesta

#### Calf Products

Tongues -----	Removal of tonsils, Hair sores, Abscesses, Foreign bodies
Cheeks -----	Ear tubes, Sections of hide, Contamination
Lips -----	Sores, Hide at angle of mouth, Tooth cuts, Contamination
Paunches -----	(To be handled and inspected similar to cattle paunches
Feet -----	Removal of Hoofs, Hide, Hair, Contamination, Identified with carcass until after post-mortem inspection is complete.
Rennets -----	When abomasi of calves are used to produce rennet, they do not need to be thoroughly cleaned; They may be emptied of their contents in an edible products department provided the operation creates no nuisance. The containers should be marked "calf rennets" and "inedible."
Brains -----	Blood clots, Bone Splinters

Pharmaceutical products should be prepared, collected, and stored in such manner that there will be no interference in the preparation of edible products or the inspection of such products.

310.11 A clean aqueous solution of common salt not exceeding 20 percent salometer strength may be used at official establishments for wetting cloths prior to their application to dressed carcasses of any species, under the following conditions:

## Section 310.11(A)

A. The cloths must not exceed in weight or thickness that of the heavy grade of muslin commonly used for clothing cattle carcasses. Aside from unavoidable overlapping at certain points, the cloths should be applied in only a single layer.

B. Rolls of cloth such as may be applied in the furrow of the neck and in the renal and iliac regions of cattle carcasses should not be wet in salt solution.

C. Salt solution may be applied to carcasses only once and only in the manner hereinbefore specified unless the carcasses are to be salt cured in their entirety in the establishment where slaughtered, in which case measures should be adopted that will maintain the identity of carcasses so treated without material additional supervision. If carcasses enveloped in cloths are placed in bags or other coverings for shipment, such outer coverings should bear prominent, legible marks of inspection.

1. Acetic acid solution may be used at official establishments for wetting shroud cloths prior to application to dressed sheep carcasses provided the acetic acid solution does not exceed one percent.

2. Sodium hypochlorite solution not exceeding 20 parts per million may be used on shroud cloths prior to their application to dressed carcasses of any species under conditions outlined in A, B, and C of this section.

3. Carcasses should be branded in the manner prescribed by the Division, and methods should be adopted that will avoid impairment of the legibility of brands by the application of the wet cloths. When carcasses are forwarded from official establishment without removal of the cloths, additional brands, if necessary, should be applied to the carcasses at locations that will be clearly visible at all times without removal of the cloths.

4. Carcasses should not be clothed in a manner that increases their weight through absorption of water.

310.12 The use of fountain-type brushes for washing carcasses and parts is not acceptable.

310.13 Cattle. Physiological effects have been observed on post-mortem inspection in carcasses and organs injected with enzyme solutions. Some of these effects are as follows:

A. Hyperemia of the subcutaneous fascia.

B. Edema and/or hyperemia of the lymph nodes (particularly those which serve peripheral areas).

C. Red-stained serous fluid in the pleural cavity.



D. Congestion of thoracic and visceral organs.

E. Edema and hemorrhage of lungs and kidneys.

Veterinarians observing slight physiological effects in the carcass may pass the carcass for food without further restriction after removal of the affected tissue. A carcass which reveals effects more severe than slight congestion of subcutaneous tissues in the carcass or viscera should be condemned for food.

310.14 In cases where sheep pancreatic glands are to be used for edible purposes, the inspectors should adjust their inspection procedures to assure that no tapeworm infested glands are used. Tapeworms in bile duct indicate possible presence of infested glands. This does not apply to pancreatic glands used for pharmaceutical purposes.

310.15 Swine. Heads sold intact (market heads) must be thoroughly cleansed by the injection of live steam through the nasal passages.

310.16 Procedures to be followed when anthrax is encountered in swine on the slaughtering floor:

A. Preliminary clean-up and disinfection:

1. Immediate cessation of operations including sticking.

2. Remove immediately the affected carcass.

3. Inspect and condemn all dropped heads from the point of detection to the head dropper.

4. Thoroughly cleanse and disinfect all knives, aprons, boots, and other equipment used by the employees contaminated through contact with anthrax-infected material.

5. In lieu of draining the scalding vat, the water may be heated to the boiling point.

6. Cleanse floors, benches, and other equipment contaminated by the affected carcasses with water heated to 180° F.

7. Cleanse and disinfect arms and hands of employees who have contacted infected materials as outlined in Part 310.9(e)(3) of the Regulations.

8. Trim all stick wounds from the point of detection to stickers.

B. General clean-up and disinfection: Procedures outlined in the Regulations shall be followed upon completion of the slaughtering of the lot of hogs of which the anthrax-infected animals were a part.

310.17 Kidneys shall be exposed from their fat covering and kidney capsule by an establishment employee. This may be done prior to viscera inspection and the kidneys examined with the other visceral organs or the kidneys may be exposed prior to rail inspection and the examination made as part of the rail inspection. Kidneys will not be required to be removed from the carcass when inspection is performed at the rail station.

Kidneys with a slight cystic condition should be passed for food after the cysts are removed by a house employee. This arrangement can be handled similar to that for "spotting" parasitic pork livers. Inspectors shall routinely survey this procedure to assure compliance. Kidneys with cystic lesions more than slight in nature shall be condemned.

Kidneys with white spots or streaks caused by lymphocytic infiltration shall be condemned if the lesions are more severe than slight. All kidneys showing pathological lesions such as abscesses, or nephritis shall be condemned.

PART 311 - DISPOSAL OF DISEASED  
CARCASSES AND PARTS

311.1 Uncomplicated arthritis as seen on post-mortem is commonly a residual lesion of a previous systemic disease such as erysipelas, brucellosis, etc., from which the animal has recovered. When the lesions of arthritis are so distributed in the carcass that removal is impractical, the carcass shall be condemned. All affected joints and regional lymph nodes should be removed on the dressing floor. Calf carcasses affected with arthritis shall be completely skinned prior to removal of affected tissue.

311.2 A general guide in respect to the terms "slight," "well marked," and "extensive" as they apply to tuberculosis nodes is as follows:

A. Slight - The lymph node is not enlarged and there is more healthy than diseased tissue.

B. Well Marked - There is more diseased than healthy tissue with or without some lymph node enlargement.

C. Extensive - Lymph nodes are greatly enlarged or nearly all the tissue is involved.

311.3 Heads tagged for slight abscesses shall be condemned when the mesenteric glands are found to be tuberculous. The condemned head will be reported as being condemned for tuberculosis.

311.4 A small well-encapsulated abscess in a lymph node of a hog head will not necessitate condemnation of the entire head. It may be reported as a cervical abscess and the head passed for food after complete removal and condemnation of the diseased lymph node. If only the head is affected, the lesion should be reported in the unlisted tags and the carcass appropriately identified on the post-mortem report.

311.5 Cattle which have reacted to the tuberculin test and in which no tuberculous lesion is found on post-mortem examination should be described by the phrase: "No gross lesion found."

311.6

A. Specimens of lesions of tuberculosis or those resembling that disease found by veterinarians in the post-mortem examination of a tuberculin reactor or of nonreactor bovine animal should be mailed to the National Animal Disease Laboratory, Diagnostic Services, T.B., Ames, Iowa. In those cases where the Animal Health Division inspector has determined a lesser number of laboratory specimens are sufficient in heavily infected herds, he will so inform the veterinary meat inspector. Specimens of skin lesions should not be forwarded for examination.

B. When considering nonreactor tuberculosis lesions, and a laboratory diagnosis is necessary to determine the disposition of a carcass or part,



## Section 311.6(B)

duplicate specimens of the lesions should be forwarded to the Pathology Laboratory. In such cases, Form MI-403-8 should indicate the carcass or part is being held pending laboratory diagnosis.

C. Specimens should be fixed in a preservative as soon after death as possible. This is necessary to prevent a reduction in the number of tuberculin organisms present in the tissue. If there is a sufficient amount of lesion tissue, one portion should be placed in formalin solution and the other portion in chloramine T. If there is only enough lesion tissue for one sample, it should be forwarded in a chloramine T solution.

D. ANH Form 6-35, Report of Nonreactors Showing Tuberculous Lesions or Thoracic Granulomas, will be used to identify nonreacting animals showing lesions suspected of being tuberculous and granulomas in the thoracic cavity.

A copy of this form will now be used to accompany specimens from nonreactors which are submitted to the National Animal Disease Laboratory (NADL), Ames, Iowa.

Form MI-403-8, Pathological Laboratory Request Report, will be used to identify specimens sent to Meat Inspection Laboratories, and specimens from reactors sent to NADL.

This form will no longer be used to accompany specimens from nonreactors to NADL.

Form MI-403-6, Final Post-Mortem Disposition of Retained Carcasses and Parts, will be used to record post-mortem findings on all retained carcasses and parts, and report tuberculosis and brucellosis reactors to the veterinarian in charge of the Animal Health Division and the state livestock sanitary official in the state in which the reactor originated.

On the copy of the form submitted to the ANH veterinarian, the lesion specimens from tuberculosis reactor animals sent to NADL will be identified beneath the appropriate tissue by an "F" if the specimen is shipped in formalin, a "C" if the specimen is forwarded in chloramine T, or an "F" and a "C" if part of the lesion is shipped in formalin and part in chloramine T.

E. Additional time required for preparing specimens for mailing, as well as the time expended to assemble and report information available at the slaughtering plant, should be billed against the Animal Health Division on C&MS-488. This service should be identified as "lesion specimen" on Form C&MS-488. Charges should not include time required to perform post-mortem examination of reactors or nonreactor animals.

311.7 Brucellosis reactors should be reported on a separate Form MI-403-6. This form should not be used for reporting any animal not classed as a reactor to the brucellosis test. On the report the reactor should be identified by the number of the official reactor tag affixed in the field, or if it is not present, other identifying ear tag numbers should be listed. Where no tags

remain, record any identifying features or characteristics of the animal. If a "retained" tag is also used, the number should follow below the reactor or other ear tag number. Each reactor should be recorded separately on the report under the heading "Brucellosis Reactor." This term is regarded as sufficiently informative for all reporting purposes unless the carcass is retained. In the latter case, the term "Brucellosis Reactor" should be followed by the diagnosis or cause for retention and a description of the lesions or conditions placed opposite the "retained" tag number.

The names of owners should not be given on Form MI-403-6. A carbon copy of the report should be sent to the veterinarian in charge of the Animal Health Division in the state in which the reactor originated. A copy of the 403-6 report may be sent to the state livestock sanitary official.

Brucellosis reactors marked as suspects and those retained on post-mortem inspection for causes other than being a reactor should be recorded also on Form MI-403, Ante-Mortem and Post-Mortem Inspection Summary, in the regular way for the disease or condition causing the retention, but without a notation that the carcass was that of a brucellosis reactor. Otherwise, no entries regarding brucellosis reactors are necessary in making up Form MI-403.

Inspectors performing ante-mortem and post-mortem inspection should give particular attention to assure that all brucellosis and tuberculosis reactors slaughtered are identified and reported. Form ANH-1-68, Report of Brucellosis and Tuberculosis Reactors Slaughtered That are Not Properly Identified When Received, should be completed under the following conditions:

A. Whenever the "B" or "T" brand is missing or not legible on the left jaw, or whenever the reactor tag is not in place on the left ear or forms which should accompany the animal are incorrectly executed or missing, the report of such improper identification should be furnished to the state and Federal livestock disease regulatory officials in the state from which the animal originated.

B. Whenever reactors are slaughtered without prior notification to inspectors, a report should be made to the Animal Health veterinarian in charge of the state in which the cattle were purchased. The slaughter of reactors should not be delayed because of lack of identification or shipping permits. After such cattle are slaughtered, all details concerning lack of identification should be forwarded in the report as outlined.

311.8 Testicles from bulls that have reacted to the brucellosis test must not be passed for food purposes.

311.9 Animals known to have recovered from listerellosis may be slaughtered as suspects. If found free from disease conditions which would require other disposition, the carcass and viscera may be passed for food but the head should be condemned.



311.10 Hogs affected with atrophic rhinitis may be identified by a characteristic disfiguration of the nose and complete or almost complete absence of the nasal turbinate bones. Small amounts of pus or catarrhal exudate may be found in the nasal sinuses. The soft tissues of the turbinates may be present but folded against the nasal cavity wall, since the supporting bony structures have disappeared. Abscesses or caseous necrotic lung lesions that are well circumscribed have been found in old cases and are probably due to inhalation of tissue particles or exudate from the nose during the active stage of the disease. This condition is usually localized and the tissues of the head that are used for food can be removed without contamination.

311.11 Exogenous pigments such as the lipochrome or carotenoid are formed outside of the body. These are the fat soluble pigments of green plants which give the normal yellow color to animal fat. They also cause hepatic carotenosis, an unusually yellow liver which should be condemned under Section 311.32 of the Regulations.

Occasionally all or several bones of young animals slaughtered in apparent normal health show a reddish brown or chocolate brown color. The pigment here is a porphyrin. Animals showing this condition should be boned.

The misuse of injectable iron preparations in the muscles of the hindquarters of swine is evidenced by brown and yellow deposits in areas about two inches in diameter. These areas often extend the length of the semitendinosus muscle on the posterior aspect of the femur. This condition is the result of intramuscular injections in adult swine of iron preparation. Since this injection is known to injure the muscle sarcoplasm, those portions affected should be removed and condemned. The remaining muscle tissue may be passed for food. The detection of this condition is made most often during ham slicing operations.

311.12 Endogenous pigments are formed inside the body. Those formed within individual cells are known as autogenous pigments; those formed by the liver are called hepatogenous, and in the blood, hematogenous.

The most important autogenous pigment is melanin. Melanin is the pigment which gives color to the skin and hair. Deposits of melanin are normally found in the surface tissue of the tongue, brain, lips, and palate of certain animals.

A condition known as melanosis occurs occasionally which is a deposition of melanin in various organs, especially the lungs and aorta, as black spots of irregular shape. This is not sufficient cause to condemn the animal as there is no change in the texture, consistency or form of the tissue. The affected parts can be radically removed and the carcass passed for food.

If deposits of melanin located in the muscles, connective tissue, peritoneum, and fat are not associated with characteristic malignant tumor formation, the carcass may be passed for food after removal and condemnation of the affected portions.



If the character and location of the melanin deposits are such that complete extirpation is difficult and uncertainly accomplished or if the deposits render the organ or parts unfit for food, the affected organs or parts must be condemned. When melanin deposits are distributed in the carcass or part in such manner that removal is impractical, the carcass or part must be condemned.

The slight melanin deposits occasionally found in the spinal meninges are not considered significant unless they are also present in the sheaths of the spinal nerves and extend into the meat. If such is the case, it may be necessary to bone the affected part or parts to remove deposits of melanin.

In hogs, uniform melanin deposits over the skin or in circumscribed areas in the skin need not be removed unless the character is such that melanin deposits are tumorous or smeary.

When melanin deposits are associated with characteristic malignant tumor formation, disposition shall be made in accordance with the Meat Inspection Regulations.

Another autogenous pigmentary condition is known as brown atrophy. It is often seen in connection with cachexia and senility. It occurs in heart muscle, in liver and in skeletal muscle of old dairy cows. The pigment is not seen as such, but it imports a brownish tinge to cardiac and skeletal muscles. If the affected parts can be radically removed, the carcass may be passed for food. If the brown atrophy is generalized, the carcass must be condemned.

311.13 The disposition of bled carcasses that have been left unopened an unusually long time due to a breakdown, careless handling, or other exigency is affected by many factors, such as the size of the carcass, external temperature, kind and amount of content of stomach and intestines, and the period of delay in evisceration. It is therefore impossible definitely to fix time limits that will determine the disposition of the carcass. The distinction between local or superficial absorption of intestinal gases and the changes produced by actual or incipient putrefaction in the tissues must be taken into account. It may be possible to remove the first, but not the second.

Therefore, it is imperative that disposition be based on post-mortem findings rather than on the length of time the carcass is left unopened. In many cases it is desirable to delay final disposition until the retained carcasses have been thoroughly chilled and inspection made part by part. The above does not void the time limit required in Section 310.16 of the regulation pertaining to hyperimmune swine.

311.14 All specimens of diseased tissues should be sent for examination to the Pathology Laboratory. Inspectors should be encouraged to use the laboratory to obtain information necessary for making proper disposition.

Naturally, the ante-mortem and post-mortem findings must be considered along with the report of histological examinations. Materials for packing and forwarding specimens, such as 10 percent formalin solution, microscope slides for

## Section 311.14

blood smears, bottles, mailing tubes, and franks should be readily available to all veterinarians who need these supplies. No specimens other than those packed in 10 percent formalin solution should be forwarded for examination except when a laboratory diagnosis is necessary to determine the disposition of a carcass or parts from a nonreactor animal suspected of having tuberculosis, a portion of the specimen should be placed in borax. The ratio of solution to tissue should be 2 to 1.

311.15 Completion of the reverse side of Form MI-402-2, Identification Tag—Ante-Mortem, to show the disposition of the suspect on post-mortem examination may be a duplication of work since these findings must be recorded on Form MI-403-6, Report of Final Post-Mortem Inspection of Retained Carcasses. Form MI-402-2 is a station record used primarily to convey information from the ante-mortem inspector to the final post-mortem inspector, and use of the reverse side of the form to record post-mortem disposition is not required. However, it may be used for this or other purposes if the Officer in Charge thinks it is necessary.

311.16 All cases of *Cysticercus Cellulosae* or cases that resemble this condition in swine must be confirmed by the laboratory. All information concerning the identification and origin of the animals should be collected. When the diagnosis is confirmed, the information should be reported to the veterinarian in charge of the state and the appropriate state livestock sanitary official in the state of origin on Form ANH-2-11C. Also, if the origin can be determined, the Public Health official in that area should be notified.

311.17 In preparing Form MI-403, Ante-Mortem and Post-Mortem Inspection Summary, the actual slaughtering time for the species involved should be recorded by the final inspector in the block provided. The actual slaughtering time does not include so-called coffee breaks, change-over times (from one species to another), breakdowns, walk-offs, etc.

311.18 Carcasses of animals affected with icterus are to be disposed of according to Section 311.20 of the Regulations. Icterus should not be confused with yellow fat conditions characteristic of certain breeds of livestock.

311.19 Carcasses of swine that give off a pronounced sexual odor shall be condemned. The meat of swine carcasses that give off a sexual odor less than pronounced may be passed for use in comminuted cooked meat food products or for rendering. Boneless pork meat from such carcasses may be shipped in containers labeled such as "Boar Meat Passed for Use in Comminuted Cooked Product Only." These properly labeled containers bearing marks of inspection may be shipped without restriction. Carcasses or bone-in cuts from such carcasses may be shipped from the establishment under restriction (325.9 of the Regulations and Manual) to other federally inspected establishments either for boning, packaging, and labeling as previously described in this paragraph or for processing in the federally inspected establishment in a comminuted cooked product.



311.20

A. A practical test for carotenosis may be made by placing a white paper towel or napkin on a cut surface of the liver. An orange-bronze stain is indicative of the condition.

B. "Slight" may be construed to mean that the lesions are to be not only small in size but also few in number.

C. If the conditions are so localized that minimum amount of trimming will change the appearance from "Moderate" to "slight," the organ may be trimmed and passed without restriction.

311.21 Carcasses of animals which are designated as "recovered" cases of anaplasmosis may be passed for food if the yellow coloration of the carcass disappears on chilling and if no other lesions of the disease are present.

311.22 Attention is called to possible lesions resulting from antibiotic injections found on post-mortem inspection of cattle carcasses. The antibiotic may have been administered to alleviate or disguise acute symptoms of disease or as a preventive measure but in any event, the animal is often marketed prior to complete absorption of the oil base antibiotic. Several instances have been reported where the lesions were observed in the round or heavy muscular parts of the carcass. The lesions are described as an oily viscous material, opaque yellow in appearance. Assay of tissues in our Meat Inspection Laboratory has demonstrated therapeutic levels of antibiotics in the meat and edible organs in these cases.

In case lesions are discovered on post-mortem examination, tissue samples should be submitted for analysis. Samples should include muscle and fat taken at the site of the injection (including the injected substance when present), liver tissue, kidney tissue and muscle derived from an unaffected part of the carcass. Each tissue sample should be identified and placed separately in plastic bags. Approximately one-half pound of each tissue will be adequate for assay analysis. Do not add borax or formalin to tissue samples in which antibiotic findings are requested. The sample should be frozen, wrapped, and packed with dry ice (also wrapped in paper and sealed to prevent direct air contact), mailed by regular airmail with a distinctive air-mail legend and addressed to the Pathology Laboratory. Normally, samples prepared in this manner, mailed during the week, will arrive in satisfactory condition.

It has been found that trimming of affected areas may or may not assure that the carcass and organs are free of antibiotic residues. Each carcass showing lesions of injections suspected of being caused by antibiotics should be retained and disposed of in accordance with laboratory findings. If the establishment desires confirmation by collect wire, indicate this information on the sample form.

To assist in reducing error in the assay and aiding in trace-back on antibiotic injections, we would like to have all available information known



regarding the case accompany the laboratory sample, i.e., ante-mortem symptoms, origin of animal number in lot, number of animals affected, antibiotic suspected, dose, manufacturer's product name, etc.

311.23 The carcasses of animals affected with the following conditions may be used for carnivorous animal foods provided they are freely slashed and decharacterized: Anasarca, nonsystemic arthritis (after removal of affected joints), Ocular Squamose Cell Carcinoma (after removal of neoplastic tissue), emaciation, eosinophilic myositis, immaturity, nonseptic bruises and injuries (after removal of abnormal tissues), sarcosporidiosis, and unborn calves. This permission should be granted with the understanding that all parts used will be promptly handled, freely slashed, and adequately decharacterized by charcoal or dye as required by the Officer in Charge. The slashing, decharacterizing and packing of the product should be accomplished in an inedible area under the supervision of an inspector. Facilities must be adequate so that the carcasses or parts to be used for animal foods are not contaminated with pus, manure, septic or toxic materials and the like. The operation must not result in a nuisance within the establishment.

311.24 Biological Residues in Meat and Meat Food Products - Instructions and Standards of Compliance. The Meat Inspection Regulations (Sections 301.1(cc), 309.19, 311.42, and 318.18) formalize general policies and provide for standards and procedures which are intended to assure that meat and meat food products from animals slaughtered and/or processed under Federal meat inspection are free of harmful residues or within safe tolerances, and are wholesome and fit for human food. Instructions and standards of compliance to make this determination will provide the inspector information to properly carry out his responsibilities.

311.25 Biological Residues in Meat.

A. Chlorinated Hydrocarbon Pesticide Compounds. The chlorinated hydrocarbon pesticides accumulate and are stored in the fat of animals which makes them of concern from a residue standpoint. The chlorinated hydrocarbon pesticides include: aldrin, benzene hexachloride, chlordane, dieldrin, DDT, and its metabolites (DDE and TDE), endrin, heptachlor, lindane, methoxychlor, and toxaphene.

1. Ante-Mortem Symptoms - Chlorinated Hydrocarbon Pesticide Poisoning. The chlorinated hydrocarbon pesticides act as stimulants or depressants of the central nervous system with neuromuscular symptoms usually occurring such as restlessness, muscular spasms, stiff and exaggerated gait, and convulsions. The onset of symptoms varies depending on the exposure dose and chemical involved, but most animals will show symptoms within the first twenty-four hours after exposure. In severe poisonings following a convulsion, the animal may appear very depressed or become comatose several hours before death. In acute poisonings a rise in body temperature is observed.

2. Post-Mortem Findings - Chlorinated Hydrocarbon Pesticide Poisoning. In animals showing acute poisoning, the lesions are nonspecific. Usually petechial hemorrhages occur in the heart and areas adjacent to large

blood vessels. Generally, the lungs are congested and show some hemorrhages. In poisoning resulting from oral administration, gastroenteritis has been observed. In chronic cases similar lesions occur, together with degenerative lesions of the liver and kidneys.

B.      Organo-Phosphorus Pesticide Compounds. The organo-phosphorus pesticides all contain the phosphorus radical in a combination which permits the pesticide to inhibit acetylcholinesterase and other cholinesterases. The organo-phosphorus pesticides include: parathion, methyl parathion, ronnel, malathion, ethion, dioxathion (Delnav<sup>R</sup>), mevinphos (Phosdrin<sup>R</sup>), and naled (Dibron<sup>R</sup>).

The biological action results from an excess of acetylcholine at nerve endings where it functions as a transmitter. Accumulation of acetylcholine leads first to stimulation and later to paralysis of all nerve synapses and motor endings, except the termination of the sympathetic fibers.

1. Ante-Mortem Symptoms, Organs, Phosphorus Pesticide Poisoning. Generally, animals first show excessive salivation. Respiratory difficulties may be observed. Restlessness and stiffness occur. Death may be due to blocking the airways by accumulation of mucous in the constricted bronchi, acute pulmonary edema or respiratory failure. Convulsions are seen only with very high doses. Variable symptoms result from individual animal susceptibility, chemical used, and degree of exposure. Susceptibility in individual animals also is due to their cholinesterase reserve before exposure to the organo-phosphorus pesticide.

2. Post-Mortem Findings - Organo-Phosphorus Pesticide Poisoning. In acute poisoning resulting from a cholinesterase-inhibiting pesticide, the lesions are never pathognomonic or particularly outstanding. Hemorrhages in the heart, lungs, or gastro-intestinal tract have been observed. Congestion of the lungs with signs of pneumonia may also be observed.

C.      Fungicides. The fungicides are widely used in the treatment of seed grains. Treated seed grains have been diverted without approval for feeding food animals. The practice at this time is not considered safe and residue tolerances in meat and edible organs from animals fed treated seed grains have not been established. Some commonly used fungicides are: Captan, Thiram, Ceresan M<sup>R</sup>, and Zineb.

1. Ante-Mortem Symptoms - Fungicide Poisoning. Evidence of acute poisoning, especially in sheep, may include excessive nasal discharge, colic, diarrhea, stilted gait, rapid respiration, depression, and coma just before death.

2. Post-Mortem Findings - Fungicide Poisoning. The lesions are not very specific, but excessive blood-tinged fluid may be present in the abdominal and thoracic cavities. Degenerative changes can occur in the liver and kidneys. Hemorrhages in the heart, lungs, and gastro-intestinal tract have been reported.



D. Inorganic Lead, Arsenic, Mercury, and Selenium.

1. Ante-Mortem Symptoms - Metallic Element Poisonings. In acute arsenical poisoning, the most prominent ante-mortem symptoms are salivation, thirst, vomiting, colic, diarrhea, staggering gait, coma, and paralysis. Lead or mercury poisonings are often associated with symptoms involved with central nervous system disorders. Intoxications associated with selenium involve varied symptoms and lesions, but the two syndromes requiring special attention are "blind staggers" and "alkali disease."

2. Post-Mortem Findings - Metallic Element Poisoning. The principal lesions in arsenic poisoning are inflammation, edema, ruptured blood vessels, and necrosis found in the gastro-intestinal tract. There may be a diffuse inflammation of the liver.

Hemorrhagic gastro-enteritis and degeneration of the liver are present in acute lead poisoning with subepicardial and subendocardial hemorrhages a constant finding. In chronic lead poisoning, the liver is yellow in color with marked degeneration of the lobules. Extensive degeneration of the kidneys is common.

The caustic action of mercury may give to the mucosa of the mouth, tongue, pharynx, and esophagus a cooked appearance. Hemorrhages in the lungs, kidneys, and liver are frequently observed. The blood is dark red and coagulates slowly. In chronic mercury poisoning, the abdominal organs are pale and the heart is enlarged due to anemia.

In chronic selenium poisoning, fibrosis and atrophy of the liver, heart, and kidneys are observed. Erosions of the articular surfaces of the long bones may be found.

E. Veterinary Drugs - Used for The Treatment and Prevention of Diseases.

1. Ante-Mortem Findings. Drugs used as feed additives, hormones, tranquilizers, anthelmintics, antibiotics, etc., serve a useful purpose when properly used. It is possible, however, that apparently healthy animals might be unsuitable for food purposes because of possible masking of symptoms of disease conditions. The ante-mortem inspector must be alert to the possibility of drugs masking the symptoms of a sick animal. Examples of these are the use of tranquilizers in certain nervous system diseases and the use of antibiotics in the disease conditions associated with pyrexia.

Swellings in the gluteal or other heavy muscle regions, discolorations in the regions of the body orifices, pronounced medicinal or chemical odors, and other abnormalities associated with the administration of drugs are important aspects of ante-mortem inspection.

2. Post-Mortem Findings. Lesions in the muscles, discoloration of the subcutis tissues, and characteristic medicinal, chemical, or other foreign odors are possible post-mortem findings associated with drug residues.



F. Submission of Tissue Samples for Biological Residue Analysis. The Livestock Slaughter Inspection Division's biological residue surveillance program is actively monitoring the tissues of food animals for the presence of biological residues. The surveillance program consists of an objective and a selective phase. The objective phase is designed to randomly select and analyze animal tissues for chemical, drug, and pesticide residues. The number of samples collected and analyzed in the objective phase is proportionate to the number of animals slaughtered in federally inspected plants located in each Meat Inspection District.

The selective phase consists of the analysis of tissue samples for a specific chemical, drug, or pesticide in conjunction with regulatory control action necessary to eliminate a biological residue which, if present in the edible tissues of an animal, would make it unfit for human food.

1. Tissue Samples for Chlorinated Hydrocarbon Pesticide Analysis. The tissue for chemical analysis for chlorinated hydrocarbon pesticides shall consist of one pound of fresh fat. The tissue should be frozen and shipped to arrive at the laboratory in good condition. Preservatives should not be used. Form MI-422, Sample for Laboratory Inspection, should be used for all requests for chlorinated hydrocarbon pesticide analysis. For the objective phase of the surveillance program, include on the MI-sample form the species and origin of the animal. In the selective phase, add to the MI-sample form any history and ante-mortem and post-mortem observations that indicated a poisoning may be involved. The tissue analysis is performed by the field Chemical Control Laboratories (except East Point, Georgia).

2. Tissue Samples for Organo-Phosphorus Pesticide Analysis. The tissue for chemical analysis for the organo-phosphorus pesticides shall consist of one pound each of fresh liver and muscle. Each of the fresh tissues should be placed in a separate plastic bag to prevent the transfer of a residue from tissue to tissue during shipment. The tissues should be frozen and shipped to arrive at the laboratory in good condition. Preservatives should not be used. An analytical method is not available to identify the entire group of organo-phosphorus pesticides and the inspector should, if possible, designate a particular organo-phosphorus pesticide to aid the laboratory in making a chemical determination on the tissue submitted for analysis. Form MI-422, Sample for Laboratory Inspection, should be used for all requests for organo-phosphorus pesticide analysis. For the objective phase of the surveillance program, include on the MI-sample form the species and origin of the animal. In the selective phase, add to the MI-sample form any history and ante-mortem and post-mortem findings that indicated a poisoning may be involved. The tissue analysis is performed by the field Chemical Control Laboratories (except East Point, Georgia).

3. Tissue Samples for Inorganic Lead, Arsenic, Mercury, and Selenium. The tissues for inorganic lead, arsenic, mercury, and selenium shall consist of one pound each of fresh fat, muscle, liver, and kidney. Each of the fresh tissues should be placed in a separate plastic bag to prevent the transfer of a residue from tissue to tissue during shipment. The tissues

should be frozen and shipped to arrive at the laboratory in good condition. Preservatives must not be used. A single analytical method is not available to identify all metallic elements, and the inspector should indicate the metallic element the evidence indicates may be involved. Form MI-422, Sample for Laboratory Inspection, should be used for all requests for inorganic lead, arsenic, mercury, and selenium analysis. For the objective phase of the surveillance program, include on the MI-sample form the species and origin of the animal. In the selective phase of the program, add to the MI-sample form any history and ante-mortem and post-mortem findings resulting from the poisoning. The tissues for lead, mercury, and selenium analysis is performed at the Chemical Control Laboratory, Washington, D. C. The tissues for arsenic analysis is performed at the field Chemical Control Laboratories (except East Point, Georgia).

4. Tissue Samples for Veterinary Drug Analysis. The tissues for veterinary drug analysis shall consist of one pound each of fresh muscle from the injection lesion, liver, kidney, and muscle taken from a distant site in relation to the injection lesion. Each of the fresh tissues should be placed in a separate plastic bag to prevent the transfer of a residue from tissue to tissue during shipment. The tissues should be frozen and shipped to arrive at the laboratory in good condition. Preservatives should not be used. Form MI-403-8, Pathological Laboratory Request Report, should be used for all requests for veterinary drug analysis. Include on the MI-sample form all necessary information such as species and origin of animal, any history, and ante-mortem and post-mortem findings that indicated a veterinary drug residue may be present in the animal's tissues. The tissue samples are analyzed for veterinary drugs at the Microbiology Laboratory, Beltsville, Maryland.

5. Tissue Samples for Histopathological Examination. In determining the wholesomeness of the edible tissues of animals in the selective phase of the surveillance program, tissue samples (1/4 to 1/2 inch thick) of heart, liver, spleen, kidney, brain (cerebellum, cerebrum, medulla, brain stem), and all abnormal tissues should be fixed in 10 percent buffered formalin solution immediately after post-mortem inspection. The fixed tissues should be submitted to the Pathology Laboratory, Beltsville, Maryland, for histopathological examination.

Form MI-403-8, Pathological Laboratory Request Report, should be used and the species and origin of the animal, any history, and ante-mortem and post-mortem observations that indicated a poisoning should be included on the MI-sample form.

G. Dispositions of Carcasses and Parts. All carcasses and parts of carcasses of animals suspected of being poisoned with a chemical, drug, or pesticide shall be retained on post-mortem inspection pending a disposition from the Livestock Slaughter Inspection Division in Washington, D. C.

H. Samples of Import Meat Products for Residue Determination. Circuit residue monitoring programs include samples of imported meat for residue



analysis. Form MI 422-2, Import Sample for Laboratory Inspection, should be used. Identify the product, country of origin, and the establishment. Submit import residue samples to the Chemical Control Laboratory servicing your Circuit.

311.26      Disposition of Cattle Carcasses Affected with Nerve Sheath Tumors. These are relatively common tumors in the bovine and are usually seen in adults. From a Meat Inspection standpoint, it is practical to group Schwannomas (neurilemmomas) and neurofibromas in a single category. These tumors arise from the sheaths covering the peripheral nerve trunks; that is either the sheath of Schwann (neurilemma) or the perineurium.

The sheath of Schwann (neurilemma) is a delicate membrane which surrounds the axon of the individual nerve fiber while the perineurium is the connective tissue sheath around a bundle of nerve fibers. In medullated nerve fibers, the axon is surrounded by myelin, and when tumors arise from these nerve sheaths, they may contain a soft jelly-like substance.

On post-mortem examination, the tumors may occur as single or multiple growth though usually many growths are found. They may be found along any nerve trunk in the body; however, the most common sites are the heart, brachial plexus, intercostal spaces, paravertebral areas, mediastinum, and coeliac plexus. Careful dissection usually can demonstrate a nerve trunk associated with the tumor. The tumors are nodular and appear encapsulated and vary considerably in size. They are white, may be either hard or soft, and gelatinous. When the gelatinous type occurs in the heart, it may be mistaken for a viable tapeworm cyst.

Microscopically, the tumors are composed of fibroblastic tissue with the cells arranged in interlacing bundles and whorls supported in either a collagenous or mucinous stroma.

The tumor cells are generally well differentiated fibroblasts and there is little or no evidence of anaplasia or mitosis. The lack of invasiveness is a good criterion in considering this to be a benign tumor. However, the slow growing tumor tissue may sometimes encompass adjacent tissue and give a false appearance of malignancy. This is particularly true in the heart where the contractions may tend to draw the muscle fibers into the tumor.

When more than one tumor is found in a carcass, they are of multicentric origin and have not spread by metastasis. This is similar to multiple warts on the skin.

In the disposition of a carcass affected with nerve sheath tumors, one must consider the systemic effect of the tumor on the health of the animal. Experience shows that though systemic effect resulting from these tumors is infrequent, the effect is usually the result of mechanical interference with function. For example, a carcass with multiple tumors but failing to show any significant systemic effect should be passed for food after removal and condemnation of all abnormal tissues. On the other hand, a carcass with this tumor, but showing evidence of cachexia, should be condemned.



PART 313 - TANK ROOMS AND TANKS

313.1        Tanking equipment such as tanks, melters, conveyors, handtrucks, etc., must be provided to assure prompt and efficient handling of inedible and condemned material. The doors between edible departments and inedible or condemned departments shall be solid, self-closing doors, snug-fitting double action doors or an effective air screen. Inedible and condemned material should not be allowed to accumulate from one day to the next unless emergency conditions exist. Pipes, chutes, conveyors, etc., used to convey material from edible to inedible departments must be effectively hooded and vented. Inspectors must be aware of the origin, destination, and purpose of all pipelines, chutes and conveyors. Inedible products containers must be watertight and distinctively marked. The marking system should be uniform and consistently applied on all such containers used in an establishment. Inedible containers must be acceptably clean before being allowed to enter edible departments.

313.2        Requests from official establishments to bring dead animals on official premises shall be directed to the District Director.

313.3        Some factors that are considered in granting permission to bring dead animals on the premises of an official establishment are adequate and suitable rendering facilities; acceptable means of conveying the dead animals to the tank charging level; ability of the establishment to promptly handle and tank the dead animals in addition to inedible and condemned material usually present at the establishment; and whether the receiving and handling of dead animals is likely to create a nuisance.

PART 314 - TANKING AND DENATURING  
CONDEMNED CARCASSES AND PARTS

314.1 Retained or condemned tag numbers of condemned animals, carcasses and products, tank seal numbers, the time of sealing and breaking of seals and the identity of the inspector should be recorded on the daily tanking form, MI-406-2.

314.2 In addition to denaturants listed in 314.4 of the Regulations, the following product may be used to denature condemned carcasses and parts: FD&C No. 3 green dye with citronella and detergent. The basic preparation is made by using one part FD&C No. 3 green dye, 40 parts by weight of water, 40 parts liquid detergent and 40 parts citronella. This basic concentrate is further diluted by using one part concentrate to 32 parts of water.

The denaturants should be used in sufficient quantity to render the product unfit for human food.

Kerosene, denaturing oil or No. 2 fuel oil should not be used to denature condemned carcasses or product.

314.3 The skinning of unborn calves shall be permitted only in enclosed areas of inedible departments. These areas shall be similar to retained cages and shall be sealed by an inspector when the cage is in use and not under direct supervision of an inspector. Any collection or handling of unborn calves, including the collecting of fetal blood or other laboratory specimens, shall be performed in these enclosed areas under positive control of an inspector. When research or educational material is being collected from unborn calves, no products other than those specified on Form MI-403-10 are to be removed from the sealed areas.

314.4 Requests for permits to obtain specimens of diseased, condemned or inedible materials for educational, research or other nonfood purposes should be referred to the Officer in Charge. Inspectors should ask agents collecting these specimens to show them their permit (Form MI-403-10) before allowing specimens to be collected.

314.5 The removal of inedible and condemned denatured material which may be infectious or contain disease organisms is of concern to state officials responsible for animal disease control. When this material is moved inter-state, the officials of more than one state will be involved. Establishments desiring to remove inedible and condemned denatured material shall obtain a letter from the animal disease control officials of the states involved stating that removal of the material is acceptable. This letter indicating acceptance should be obtained annually. One copy should be kept in the local Meat Inspection office and a copy should also be forwarded to the Officer in Charge.

314.6 Establishments desiring to save condemned material for fish or animal food shall have separate equipment acceptable to the Officer in Charge

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for this purpose. These operations shall not create a nuisance or interfere with inspection. Records should be kept by the inspector to assure that the proper temperatures and holding periods are maintained on fluke-infested livers.



PART 315 - RENDERING CARCASSES AND PARTS INTO LARD,  
RENDERED PORK FAT, AND TALLOW, AND OTHER COOKING

315.1 Carcasses and parts passed for cooking should be held under strict control at all times. Trucks and containers used to hold and convey product passed for cooking should be conspicuously marked and equipped with a sealing device.

315.2 Edible rendered fats containing tank water in first stages of sourness may be reprocessed if the handling is begun promptly after its detection. There is no provision for rehandling for food purposes rendered fats that contain tank water beyond the first stages of sourness. The fats may not be mixed with sound edible product in any proportion as a recovering process. The product should be retained until further approved processing determines its final disposition. Treatment of rendered fats may be undertaken immediately without waiting for a report from the laboratory.

315.3 Cod, kidney, and breast fats bearing the marks of Federal inspection may be admitted into official establishments for edible purposes provided the fats are clean, sound, and otherwise fit for human food.

315.4 Salt used to settle rendered fats should be free from extraneous material that indicates contamination with filth but may contain insoluble mineral matter that does not remain in the rendered fat.

315.5 Partially defatted beef fatty tissue and partially defatted chopped beef manufactured by low temperature rendering processes require the use of acceptable raw materials, prompt chilling, and subsequent freezing of the residue. The process will not destroy or inactivate bacterial contaminants nor will the physical appearance and character of the residue always reflect the true contamination level in all cases. To insure production of sound products of this type, the following safeguards must be followed:

A. The raw material must be in excellent condition. The condition of the fat or product should demonstrate its recent production and handling under proper sanitary conditions and refrigeration. Any soilage or physical condition detracting from its proper handling would make it ineligible for use in the production of these types of products.

B. Raw product handled in establishments other than federally inspected establishments is not eligible for use in manufacturing these products.

C. The raw product must have been refrigerated and maintained under refrigeration at 50° F. or less. Killing floor fats moving directly to the process need not be refrigerated.

D. The partially defatted product should leave the refrigeration cycle of the process at 40° F. or less.

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E. The partially defatted product should be rapidly frozen so as to be solidly frozen within a 6-hour period, unless used immediately in products.

Samples of the partially defatted chopped beef or beef fatty tissue should be sent to the Microbiology Laboratory for the purpose of evaluating the inspectional controls of the establishment. The samples should be frozen and packed to prevent defrosting in transit.

315.6 Partially defatted beef and partially defatted chopped pork may only be manufactured from beef and pork, respectively, not from beef fat nor from pork fat. Each individual piece of meat cuts or trimmings used in manufacturing these partially defatted meat products must contain at least 12 percent lean meat. This shall be determined by a practical knife-cutting separation of the lean from the fat tissues. Samples should not be sent to the Meat Inspection Laboratories for fat analysis.

## PART 316 - MARKING, BRANDING, AND IDENTIFYING PRODUCTS

316.1 Material submitted by establishments through the Officer in Charge or his designated representative for approval by the Technical Services Division should be carefully examined to insure that it meets the requirements of the applicable Regulations.

Only legible imprints of required markings should be submitted for approval or use in an official establishment. Approval of the marks of inspection appearing in newspaper advertisements, billboards, and the like is not necessary; although, if the opportunity is afforded to preview such matter locally, the markings should conform to the standards. The mark of Federal inspection should not be used in such advertisements in a misleading way.

316.2 The establishment will be required to furnish all brands, including replacements, as they become necessary. When received, new brands should be delivered immediately into the custody of a Department employee and the approval and use of these brands should be in accordance with the Meat Inspection Regulations.

316.3 Brands bearing the inspection legend should be uniform in size and design and in the exact form of the official brands.

316.4 The control of brands includes those brands held in supply or storage rooms as well as those in service. The owner or operator of an official establishment must make arrangements with the Officer in Charge to carry this out.

316.5 Property records of metal brands bearing the inspection legend are no longer maintained. It is not necessary to report lost or unserviceable brands to Washington. Unserviceable brands should be properly defaced and disposed of at the Circuit, except when the 2-½ inch rubber brands mounted on aluminum handles which are furnished by the Department become unserviceable, the aluminum handles should be returned to the Meat Inspection Administrative Staff in Washington for reuse.

316.6 Whether lost or unserviceable brands should be immediately replaced by the establishment is a matter to be determined by the Officer in Charge. He determines the number of brands needed to properly meet requirements at the establishment involved.

316.7 An up-to-the-minute inventory of all brands bearing the inspection legend, whether in use or in storage, should be maintained as prescribed by the District Director.

316.8 Application of the marks of inspection to clothing, walls, posts, and the like must be discouraged. Brands bearing the marks of inspection or other marks should be kept clean while in use. A clear legible imprint of an approved brand cannot be made with a worn or mutilated brands. So-called grade brands, buyers' brands, and marks signifying rabbinical inspection



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should be placed so as not to obliterate, or be confused with, required markings.

316.9 The legibility of the marks of inspection has been improved in some cases by drilling two small holes (about one-sixteenth inch in diameter) through the face of the hot-iron brands to permit the escape of steam that forms when the hot brand comes in contact with the wet surface of product. The use of cast steel burning brands results in improved and more legible inspection legend imprints on cured products.

316.10 Only approved branding ink should be used. Purple branding ink is composed of "FD&C Violet No. 1 dye, water, alcohol, and sugar." Acetone may be added to shorten drying time. Marking pencils containing FD&C No. 1 dye should be used for marking meat cuts and carcasses.

316.11 A hot ink brand equipped with a thermostatic control to regulate the temperature of the electrically heated burning element greatly improves branding on meat, meat byproducts, and meat food products. Ink for hot brands may be prepared without sugar; an acceptable dye and specially denatured alcohol 23A (alcohol plus 10 percent of acetone) may be used if desired.

316.12 Official grading terms such as Prime, Choice, Good, Standard, Commercial, and Utility, and the letters AA, A, B, and C, which are associated with these official grades of meat of cattle, sheep, and calves, may be used in official establishments only on meat graded as such by an official representative of the Federal Meat Grading Branch.

Wholesale and retail cuts derived from carcasses bearing an official grade designation may be identified with the same grade designation as appears on the respective carcass from which the cut is derived.

These instructions do not apply to the terms "Army-AA," "Army-A," "Army-B," or similar terms applied to meats or the package thereof in conjunction with the standard Army veterinary inspection stamp by inspectors of the United States Army.

316.13 Impressions of grade markings applied to meat in official establishments under the supervision of an official representative of the Federal Meat Grading Branch need not be submitted to the Technical Services Division for approval. However, such impressions should be approved by the Officer in Charge prior to use. Grade markings, other than official markings, should be submitted to the Technical Services Division for approval in the usual manner.

316.14 After carcasses are washed and clothed, each half should be legibly marked "U. S. Inspected and Passed."

316.15 Carcasses conditionally passed for food on account of *Cysticercus bovis* as prescribed in Section 311.24(f) of the Regulations may be marked with the inspection legend and establishment number at the time they are placed in a freezing compartment maintained under lock or seal.

316.16 Calf carcasses shipped from one official establishment to another with the skin attached may be marked at the second establishment after the skin has been removed with the receiving establishment's number and inspection legend. This in no way relieves the responsibility of placing legible brands on each quarter of the carcass at the originating establishment. Cuts taken from carcasses marked at another official establishment may be branded with the inspection legend and identifying number of the official establishment in which the fabrication is done.

316.17

A. It is not practical to designate the location and number of brand imprints to be applied on carcasses because of variations in local conditions and in the further processing of the carcass. More than the required minimum marks of inspection may be placed on carcasses as local circumstances warrant.

B. The No. 1 brand (1-3/4 inch diameter) shall be used for branding cattle and hog carcasses. The No. 2 brand (1-1/4 inch diameter) shall be used for calf carcasses. The No. 3 brand (3/4 inch diameter) shall be used for sheep and goats, and loins and ribs of pork.

316.18 Beef tenderloins should be individually marked with the inspection legend and establishment number before they leave the official establishment.

316.19 Pork stomachs are considered meat byproducts rather than animal casings even though intended for use as containers of meat food products.

316.20 The use of metal clips or staples to affix labels or tags to meat food products is not permitted because of the possibility of metal inclusion in product.

316.21 Form MI-408-1 properly modified to describe clearly the product transported may be used to cover the shipment of product to be further processed as provided for in Section 316.13(a) of the Regulations. This form is to be used, of course, in addition to the certification required in Part 325 of the Regulations.

316.22 If not otherwise specified, statements such as "cereal added," "nonfat dry milk added," "artificially colored," and the like should be placed on the product or on material to be attached to the product, in the order in which the additions normally are made in processing the article.

316.23 It is not practical to state specifically the exact size or weight of products customarily sold at retail intact. Factors that must be considered are: Class of product, geographical distribution, customer expectancy, etc.

316.24

A. Branding the word "tender" or any of its derivatives on heated and smoked pork products may be done only at the establishment at which the processing takes place. The product is subjected to sufficient heat to attain an internal temperature of at least 140° F.



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B. Use of the term "Cooked," "Fully Cooked," "Thoroughly Cooked," "Ready-to-Eat," or "Ready-to-Serve" on heated and smoked pork product is acceptable only when the processing results in the product exhibiting the usual characteristics of a fully cooked article, such as partial separation of the meat from the bone, easy separation of the tissues, and a cooked color, flavor and texture throughout the product. This usually requires a minimum internal temperature of 148° F. Proposals for the use of these terms should be accompanied with the full description of the process and internal temperature attained when the marking material is submitted for approval.

316.25 Soluble seasonings consisting of spice extractives having a distinct red color, such as extract of paprika, should not be used in fresh meat products such as hamburger, fabricated steaks, cubed beef, meat patties, etc., because of the color enhancing properties of the seasoning. If these soluble spice extracts are used in the formulation of cured sausage and other meat food products, the amount used should be controlled so that the color of the finished product will not be significantly different from that of a product prepared with the same ingredients but without the soluble spice extract.

316.26 When tags, tissue strips, brands, and the like are used to apply the list of ingredients, only applicable required markings should be included thereon. However, if nonrequired features are added, then all applicable required labeling features should be shown. To illustrate: If the name of the product is added on a tag bearing the list of ingredients in bologna, that side of the tag bearing the two features should be completed by adding the name and address of the firm.

316.27 The identity of all ingredients through all stages of fabrication of a meat food product must be maintained.

316.28 When cured meats are used as part of a fabricated product for which minimum meat requirements have been established, consideration should be given to the amount of added substances in the cured meat when calculating the formula on the fresh weight basis.

316.29 Smoked meats such as ham or bacon used in fabricated product may be declared as "Smoked Pork," or "Ham," or "Bacon," as the case may be in the list of ingredients. Such declarations will insure the smoked product as included is identified.

316.30 The domestic meat label should be placed on shipping containers enclosing a combination of inspected product and food articles other than meat products.

316.31 If an immediate or true container serves also as a shipping container, the marks of inspection, as well as the other required features, should be applied.

316.32 Markings other than the inspection legend and establishment number, applied to shipping containers by stencils, pencil marks, or in print, may be used with the approval of the Officer in Charge. Such markings must not be



false or misleading. They may be used in addition to required markings but not in lieu thereof.

316.33 Domestic meat labels that have become detached from the shipping container of federally inspected product may be replaced with domestic meat labels of the receiving official establishment to facilitate further shipment after proper identification of the product has been made.

316.34 The marking required on the shipping container of inedible rendered fat need not be submitted to the Technical Services Division for approval.

316.35 Packaged meat of foreign origin which is repackaged under Federal meat inspection shall be identified as to the country of origin on the new package. When meat in carcass form of foreign origin is separated into cuts which normally have an inspection legend, they shall be marked to show the country of origin adjacent to the marks of inspection. Product resulting from usual boning operations in official establishments need not be kept separate from domestic product for identification.

316.36 The carcasses of animals injected with papain shall be marked with the statement "Tendered with Papain." These markings shall be applied in a continuous manner by means of a roller brand along the round, loin, rib, neck, chuck, and foreshank and from the flank region over the flank, plate, rib, and brisket. Imprints of such roller brands should be forwarded for approval if not already approved.

PART 317 - LABELING

317.1 Although there is a connection between Parts 316 and 317, each part is a separate and distinct entity. Both deal with the identification of product; Part 316, by application of lettering or affixing of tags or labels directly to the product, and Part 317, by the labeling of the immediate cover or container. In some instances, the fulfillment of the requirements of Part 317 eliminates the necessity of compliance with Part 316. In a broad sense, labeling requirements are to assure that a true and clear picture of the product is available to the consumer.

317.2 No reference to Federal meat inspection is permitted on labeling material except as it is embodied in the inspection legend.

317.3 Large containers such as tierces, drums, barrels, and fiberboard boxes which enclose loose or unpackaged product are true containers and as such must be labeled. Whether or not all markings are applicable depends on the kind of product. It is not practicable to apply a statement of ingredients to a container enclosing more than one type of fabricated product. See the marking requirements imposed by Part 316.

317.4 Labeling may consist of a combination of printing, stenciling, box dyes, and the like, for large-size true containers and for shipping containers. Crayons, marking brushes, and the like, are not acceptable for applying any required labeling features to such containers except the figure indicating the quantity of contents.

317.5 While stencils, box dyes, and labels for large-size true containers and for shipping containers may be used with the provisional approval of the Officer in Charge, the inspection legend in any form must be approved by the Technical Services Division.

317.6 Empty containers bearing only approved markings and intended for federally inspected product may be used for display or advertising purposes without approval of the Technical Services Division.

317.7 Properly labeled or marked product may be covered with loosely woven stockinet, provided the marks are plainly visible through the covering.

317.8 The establishment number may be embossed on either the bottom or cover of hermetically-sealed containers.

317.9 The establishment number should be embossed and the date of canning should be shown by code or otherwise on the metal caps for hermetically-sealed glass containers of products fully processed within such containers. The identity of the contents should be shown in a similar manner when such identity cannot be positively established by other means. These features can be legibly and permanently applied with permanent ink, such as lithographer's ink, and a mechanical stamping device immediately after the cap is affixed to the glass container.

317.10 Labels used directly on and in connection with meat food products may be, and on occasion have been sources of contamination. For example, water-soluble or fat-soluble ink used in printing labels may become transferred to the product. The paper or other substances constituting the label may contaminate the product through disintegration, presence of soluble components, or the like.

It would not be practicable for the Technical Services Division to control or anticipate such misuse of labels, even though it does in some instances, pick up probable objectionable conditions. The only adequate control is the supervision over labels exercised by inspectors at establishments. Inspectors should, therefore, take precautions to assure that a label offered for use at an establishment is:

- A. Approved in accordance with the Regulations.
- B. Used on the product for which it is applicable as set out in terms of the approval and in the Regulations concerning the composition of the product.
- C. Placed on product or container in such manner that all of the required features appear on the principal display panel.
- D. Used on product which offers sufficient contrast in color so that the required features printed on transparent coverings are prominently displayed.
- E. Printed with permanent ink; all of the required features being clearly legible.
- F. Such as will not result in contamination of the product.

317.11 An inspector can readily see ink that has been transferred to the product or a label that has disintegrated or corroded. However, he faces a different problem with substances used in the manufacture of plastics and paper coatings. Generally, manufacturers of plastic films, coatings, and containers present to the Technical Services Division samples of their materials and a statement of their composition in order to have their acceptability determined before making deliveries to inspected establishments. If the inspector has a question concerning the acceptability of such materials, he should send a sample of the material, with all identifying marks, the name and address of the manufacturer, and any other pertinent information, to the Technical Services Division for advice. Aluminum foil (containing no lead) is acceptable from a toxicity standpoint for use in direct contact with product; although when in contact with well salted product, corrosion may take place to an extent that would make its use undesirable.

317.12 A standard of composition has been identified for each product for which a label has been approved. These standards of composition include the minimum meat content and in some instances they identify the maximum amount of water, binder, extenders, fat, and other meat or meat byproduct that may be used.



Many of the standards are contained in the Meat Inspection Regulations and some appear in Meat Inspection Memorandums. Others are not published but are made effective through our label control program by the approval or disapproval of labels. When labels are submitted for approval for a product for which a standard of identity has not been published, it must be accompanied by the formula and a complete description of the product's preparation so that the person reviewing or supervising the use of the label may determine if the label is intended for, and is used on, product complying with its standard of composition.

Samples of new products and products on which there is a question as to whether they are classed as meat food products should be submitted to the office of Standards Group, Technical Services Division, Consumer and Marketing Service, United States Department of Agriculture, Washington, D. C. 20250. Information should be furnished regarding the name of the product and a full description of the method of preparation, with the ingredients and their percentages. If the samples are perishable, they should be packed in dry ice or otherwise protected so that they will arrive in a wholesome condition.

A. "Salisbury Steak" is a cooked product prepared with chopped beef and may contain not more than 25 percent pork and/or veal. It may also contain whole eggs and extenders, substances such as bread crumbs, cracker meal, cereal, nonfat dry milk, and reconstituted skim milk.

B. In many establishments product labeled "Sliced Cooked Ham" is derived from canned ham identified as "Cooked Ham, With Natural Juices, Gelatin Added."

Upon removal of the product from the can and preparing the ham for slicing, the free juices and a portion of the gelatin are discarded. It must be noted, however, that a portion of the gelatin remains in the seams, and in some cases on the surface of ham. It, therefore, should be required that cooked sliced ham derived from canned hams be labeled "Sliced Cooked Ham, Gelatin Added" to properly identify the product.

C. Chopped Ham and Pressed Ham may use shank meat as an optional ingredient to the extent of not more than 25 percent over that normally present in boned ham. A figure of 12 percent shank meat has been adopted as representative of boneless whole ham. An additional allowance of 25 percent would, therefore, equal 3 percent of the whole ham ingredient. Determine first the weight of the whole ham ingredient in each batch of chopped ham and allow the addition of 3 percent of this weight in shank meat.

317.13 Inspectors should report all new processing methods to the Technical Services Division. The report should include new types of equipment and merchandising practices that might have an effect on the character of the finished product or affect standards of composition and labeling.

317.14 When deciding on a common name for a product, the consumer's knowledge rather than that of the meat industry should be considered. For instance, in the packing industry "picnic" is the common name for a product, but since it is not well known to the public as such, it should be described as a "pork shoulder picnic" in order to identify it adequately. The name of the product applies to the finished article; the ingredients are listed in the order of the quantities used in the preparation of the products.

317.15 When fried pork skins are prepared from skin removed from smoked pork bellies, names such as "fried pork skins," "fried bacon skins," or "fried bacon rinds" may be used to designate the finished product. When labeling material is submitted for approval, the kind of skin used in the product should be stated.

317.16 If the term "spice" or "spices" is used in the list of ingredients, it must refer to whole or ground natural spices. Spices may, however, be covered by the general term "flavorings" in the list of ingredients.

317.17 When the term "farm style" or "country style" is used in connection with sausage, the product must be prepared with natural spices to the exclusion of oleoresins, essential oils and other spice extractives. Sugar is the normal sweetening agent for "farm style" or "country style" sausage.

317.18 Although nearly every ingredient in a product contributes to its flavor, such substances as parsley, pistachio nuts, pimentos, and pickles which are not added to a product solely for flavoring purposes must be specifically named.

317.19 Pimento is applicable to allspice, whereas pimienta refers to the coneshaped thickwalled Spanish sweet pepper. Other varieties of sweet peppers, such as the common bell-shaped variety, are listed as sweet peppers.

317.20 The following applies in listing the ingredients used in the preparation of meat food product:

A. The terms "pork," "beef," "veal," "mutton," and "goat meat" are acceptable regardless of the anatomical derivation of the meat, except that tongues and hearts should be specifically named; for example, pork tongues and beef hearts. A declaration such as "beef cheeks" or "pork cheeks" should be used for untrimmed cheeks; that is, cheeks with the glandular material attached. The Technical Services Division may require specific declaration for meat ingredients on labels for certain products such as chili con-carne, chili con-carne with beans, canned beef hash, ham spread, and fabricated fresh meat items (hamburger, chopped or ground beef, and "steaks").

B. Meat byproducts such as beef tripe, pork stomachs, pork livers, and pork fat should be individually declared, as such.

C. The designation "boned pork heads" is applicable to meat and meat byproducts from pork heads provided the relative amount of muscle tissue is not less than that normally present on pork heads.

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D. The term "cereal" is acceptable to denote one or more meals or flours derived from cereal grains without more specific declaration. Bean flour, soya flour, or potato flour should be declared by name because they are not classed as cereal.

E. The foregoing should not be construed to invalidate approval of labels bearing more specific ingredient declaration than those mentioned in A, C, and D, nor to prevent the use of such designation when desired by the establishment.

F. Dehydrated onions, dehydrated garlic and dehydrated celery used as seasoning agents may be shown as onions, garlic or celery as the case may be.

G. Either of the terms "Corn Syrup" or "Corn Syrup Solids" may be used as an ingredient identification on labeling material for meat food products to reflect the use of either corn syrup or corn syrup solids.

H. Pork fat should be declared as such in the statement of ingredients. As a guide for judging the distinction between pork and pork fat, skinned pork jowls may be declared as "pork" but clear fatbacks and clear shoulder plates must be declared as "pork fat."

I. Ingredients such as cracker meal, macaroni, and similar substances which in themselves are fabricated from various ingredients may be declared as such instead of listing the individual component parts.

J. When two meat ingredients comprise at least 70 percent of the meat and meat byproduct ingredients of a formula and when neither of the two meat ingredients is less than 30 percent by weight of the total meat and meat byproducts used, such meat ingredient may be interchanged in the formula without a change being made in the ingredient statement on labeling materials, provided that the word "and" in lieu of a comma shall be shown between the declaration of such meat ingredients in the statement of ingredients.

K. When unskinned pork jowls are used in the preparation of a meat food product, they shall be reflected in the statement of ingredients as "Unskinned pork jowls" and the product shall not be identified as "All Meat."

L. Dehydrated onions (chips) and dehydrated potatoes used as a component rather than a seasoning agent should be listed as dehydrated onions and dehydrated potatoes.

M. Onions, garlic and parsley used as such should be listed as onions, garlic and parsley in the ingredient statement.

N. Powdered onions, powdered garlic, and powdered parsley may be declared as flavoring.

O. In the list of ingredients spice extractives may not be listed as spices, but may be listed as flavoring.



P. "Cheese" unqualified may be featured in the name of the product which will be reflected in the ingredient statement by its recognized standard of identity, such as, Pasteurized Process Cheese. However, showing "cheese" unqualified in the ingredient statement refers to "Cheddar" cheese only.

317.21 The term "Center Cut" may be used in connection with labeling material for pork loins from which the shoulder end has been removed by cutting crosswise to the length of the loin at a point posterior to the edge of the scapular cartilage and from which the ham end of the loin has been removed by cutting crosswise to its length anterior to the cartilage on the tuber coxae.

The term "Center Cut Pork Chops" may be used to identify chops cut from any portion of a center cut pork loin.

317.22 The general terms "cheek trimmings" and "tongue trimmings" may be used as follows:

A. The tissues resulting from converting cheeks to cheek meat should be identified as "Salivary Glands, lymph nodes and fat" (preceded by the name of the species from which derived).

B. The term "tongue trimmings" includes the entire mass of tissue, except cartilage and bone, obtained through converting long-cut tongues to short-cut tongues. Such term should be further identified according to species.

C. When the muscle tissue is removed from tongue trimmings, the resulting mass should be identified as "Salivary glands, lymph nodes and fat" (preceded by the name of the species from which derived); the muscle tissue may be identified as "beef," "veal," "mutton," "pork," or "goat meat," as the case may be.

D. Trimmings derived from the tongue itself should be identified as "tongue meat," preceded by the name of the species from which derived. Tongue meat should not include any of the tissues described in paragraphs B and C of this section.

317.23 Shortening prepared with a mixture of meat fats and vegetable oils may be identified either as "Shortening Prepared with Meat Fats and Vegetable Oils" or "Shortening Prepared with Vegetable Oils and Meat Fats" without regard to the order of predominance of the fats and oils used, provided that there is a significant amount of the lesser ingredient used.

317.24 If the firm can be located through a telephone or city directory, the label need not include the street address and number. The city and state are sufficient. If the location of a firm is other than the manufacturing location, the city should be qualified by a term such as "general office."

## Section 317.25

317.25 The statement of net weight or measure should be expressed in the largest applicable unit. Therefore, 1 pound is used instead of 16 ounces, and 1 pound, 4 ounces in lieu of 20 ounces. However, small packages of sliced bacon may be shown as containing  $\frac{1}{2}$  pound or 8 ounces; packages of sliced dried beef may be labeled  $\frac{1}{4}$  pound or 4 ounces.

317.26 Vienna sausage packed in water or brine or similar products in size 208 x 208 can should be 4 ounces net weight.

317.27 In determining compliance with the Regulations, the inspector should see that all wrapping and packing materials are not included in the net weight.

317.28 A statement of the gross and tare weights in lieu of the net weight on such containers as tierces, barrels, drums, boxes, crates, and large-size fiberboard containers is acceptable.

317.29 Meat and meat food products in casings need not be marked with a statement of quantity of contents; however, space may be provided on the casing for applying the weight such as an opaque area preceded by the words "Net Weight." If the casings are marked with a statement of quantity of contents, the inspector should check to see that such statements are accurate.

317.30 Frankfurters, wieners, pork sausage and breakfast sausage may be packed at catch weights. When these commodities are not packed at uniform weights of 8 ounces, 12 ounces or 1 pound, the statement of quantity of contents should be shown with the same degree of prominence as the other required labeling features, including the name of the product.

Customarily, containers for shingle-pack sliced bacon are rectangular in shape and hold quantities of 8 ounces, 1 pound and 2 pounds. Deviations from these standard weights are acceptable when the net weight statements are accorded prominence equal to the most conspicuous label feature, including the product name, and are separated from other features and printed in a color of ink contrasting sharply with the background.

The same requirements apply to meat pies when in square containers and the quantity of contents vary from the usual 8 ounces.

317.31 Systematic controls should be maintained by the establishment at all times to check the quantity of contents. Deceptive filling of containers must not be permitted, even though a correct statement of the quantity of contents is shown.

317.32 In most cases, the net weight can be determined at the time of packing. However, in some instances, especially on imported products and products such as canned frankfurters, the net weight of the completely processed articles is checked. To insure a uniform method of determining net weight, the following procedure is outlined:

- A. The weight of the unopened can is tabulated as the gross weight.

B. The weight of the clean, dry can is tabulated as the tare weight.

C. The difference between the gross weight and the tare weight equals the net weight.

317.33 After checking the net weight of several cans, it is possible to determine the net weight of additional cans without opening them by subtracting the average tare weight from the gross weight of the unopened can. However, enough cans should be opened to establish a tare that is representative of the lot. The number of cans necessary to establish a reliable average tare depends on the uniformity of the can weights. If the difference in weight between the lightest and heaviest of the first six cans opened is no more than  $1/8$  of 1 ounce, the average of the first six cans will probably suffice as an average for the lot. If the difference in weight between the lightest and heaviest is approximately  $3/16$  of 1 ounce, six more cans should be opened. This refers particularly to cans having a capacity of approximately 12 ounces. The tare weight of larger cans may vary in proportion. Each lot of product should meet the following requirements:

A. The average net weight of the cans checked should equal at least the stated net weight.

B. There should be as many cans that are overweight as are underweight.

C. The underweight should equal the maximum tolerance on not more than 20 percent of the total. (The incidence in a hundred cans of a very few containing a small quantity below the maximum underweight with the average at least equaling the stated net weight is not sufficient to reject a lot if the other net weight requirements are met.)

317.34 If a canned meat food product consists entirely of material that is nutritious and suitable for food, the statement of net weight should include the total weight of contents.

However, if the canned meat food product is prepared with a packing substance not customarily used for foods such as water, brine, or agar, then the stated net weight should be the weight of the meat or meat food product, exclusive of packing material, taken after the article has been packed several days. For example, the stated net weight of pigs' feet in vinegar pickle should be the drained weight of the pigs' feet and the stated net weight of whole ox tongues in agar should be the weight of the ox tongues exclusive of agar. Some products, such as cooked pigs' feet, cooked lamb tongues, and cooked sausage, may be packed in a vehicle at such weight as to result in regaining the moisture that has been lost in cooking before the product leaves the establishment.

### 317.35

A. The following underweight tolerances are allowable for comminuted products and for liquid and partly liquid products in which the liquid is included in the net weight:



Section 317.35 (A)

For a 6-pound can	- - - - -	3/4 of 1 ounce
For a 4-pound can	- - - - -	1/2 of 1 ounce
For a 2-pound can	- - - - -	3/8 of 1 ounce
For a 1-pound can	- - - - -	5/16 of 1 ounce
For a 12-ounce can	- - - - -	1/4 of 1 ounce
For an 8-ounce can	- - - - -	3/16 of 1 ounce
For a 6-ounce can or less	- - - - -	1/8 of 1 ounce

B. The overweight tolerances for comminuted products and for liquid and partly liquid products in which the liquid is included in the net weight are allowed as follows:

For a 6-pound can	- - - - -	2½ ounces
For a 4-pound can	- - - - -	2 ounces
For a 2-pound can	- - - - -	1½ ounces
For a 1-pound can	- - - - -	1 ounce
For a 12-ounce can	- - - - -	3/4 of 1 ounce
For an 8 ounce can	- - - - -	1/2 of 1 ounce
For a 6 ounce can or less	- - - - -	3/8 of 1 ounce

C. The overweight should not result in an overstuffed appearance of the can. Overstuffed cans should be handled in accordance with the Regulations. The following net weight tolerances are applicable to frankfurters packed in brine in consumer-size cans:

1. The overweight should not exceed the weight of one whole link.
2. The average net weight should equal the stated net weight.
3. No underweight should exceed 4 percent of the stated net weight.

D. The average net weight for the large institutional-size cans should equal the stated net weight. The overweight should not exceed 2 percent of the stated net weight and the underweight should not exceed 1 percent of the stated net weight.

317.36 The mark of inspection in whatever approved form it may appear is the symbol of our service that reaches the public intimately. It erases from the consumer's mind the question of whether the product on which it appears has been subjected to complete inspection. It is our certification that the product has been carefully inspected and found to be sound, wholesome, and fit for human consumption at the time of shipment and that the labels are not deceptive or misleading. Therefore, we should take great pride in its significance and exercise constant vigilance in its application.

317.37

A. The master label file system in the Technical Services Division consists of a combination of microfilm and International Business Machines card records.

Each label with all material pertinent thereto is photographed. To keep the photographic work at a minimum and for uniformity in photographing labels and other material presented in connection with requests for approval, we ask that you adopt a form for transmittal of sketches and labels illustrated at the end of Part 317. For use in the Technical Services Division, one copy of the label material being presented for approval should be attached to the transmittal form with only one staple. Mount all other copies to the transmittal form in any manner that suits your needs. Do not, however, cover the space provided for the approval stamp. Establishments should prepare a supply of the form for their own use on 8 x 10½ size paper. Your cooperation will assist greatly in the operation of the master label file and will be appreciated.

B. To increase the efficiency with which labeling materials are received, and approved or disapproved labels are dispatched from the Technical Services Division and to eliminate unnecessary label files, the following procedures will apply.

1. Submission of sketches and finished labels.

- a. General instructions.

- (1) Each copy of a sketch or finished label must be mounted on a transmittal form (See Fig. 14 - Agriculture Handbook 190 or Section 317.37 - Manual of Meat Inspection Procedures of the United States Department of Agriculture). Forms will be provided by the establishment, firm, or importer.

- (2) Sketches or finished labels for products for which a standard of identity has not been published must be accompanied by a complete formula and detailed description of the method of preparation on the copy of the transmittal form. Such information is not generally required for products for which a standard of identity has been published; however, this may not always be true.

2. Labeling material for domestic products.

- a. General instructions - this material may be submitted:

- (1) Through the Officer in Charge or an inspector designated by the Officer in Charge.

- (2) Through central label office of the firm or corporation.

- (3) By personal visit of establishment or firm representative or agent to the office of Meat Labels and Packaging Group, Technical Services Division.

b. Requirements to apply for each method of submittal:

(1) Through the Officer in Charge; four copies of sketch or final label accompanied by Form MI-442 executed by an inspector of the Department.

(2) Through firm's central label office: four copies of sketch or final label, plus one or more as required by firm's label office. This method is limited to those firms or corporations who maintain a central label office, and who have received permission from the Director, Technical Services Division to submit labels directly.

(3) By personal visit of representative or agent; four copies of sketch or finished label, plus one or more as required by firm or representative. Submittal must be accompanied by Form MI-442 executed by an inspector of the Department.

3. Labeling material for import products.

a. General instructions.

(1) Only two sketch labels are required. Two finished labels are required, plus one additional for each port of entry through which the product is to be offered for import inspection.

4. Request for extension of temporary approvals.

a. General instructions.

(1) All requests for extension of temporary approvals must be directed, in writing, to the Meat Labels and Packaging Group. The requests must clearly identify label approval number, date of temporary approval, product name, quantity of labels on hand, quantity of labels used since grant of temporary approval or last grant of extension, and estimated time required to exhaust supplies. It is not necessary to submit the labeling material concerned unless the expiration date has passed.

(2) Labels for domestic product. Request must be forwarded to the Meat Labels and Packaging Group through the Officer in Charge for any comments or recommendations that are appropriate.

(3) Labels for import products. Request should be forwarded through the Officer in Charge at the ports of entry for any comments or recommendations that are appropriate.



5. Approval duplication requests.

a. General instructions.

(1) Labels for Domestic Products. Request for stamp of duplicate approval should be forwarded through the Officer in Charge, making reference to the approval number and date of approval for the labels involved. Sufficient copies of the label should be furnished to satisfy required distribution.

(2) Labels for Import Products. Request for stamp of duplicate approval should be furnished making reference to the approval number and date of approval on the transmittal form for the label concerned. Sufficient copies of the label should be furnished to effect distribution to the ports of entry having interest. The labels sent for duplicate approval must be exactly like the labels previously approved.

6. Distribution of approved labeling material and label correspondence by the Technical Services Division.

a. General instructions.

(1) Approved sketches and finished labels for domestic products. Two copies of sketches or finished labels will be sent to the office of the inspector at the establishment. The inspector will retain one copy for label files maintained in the Meat Inspection office located in the establishment and deliver the second copy to the appropriate establishment official. Copy or copies will be distributed by the Technical Services Division to firm's central label office when such request is on file.

(2) Approved sketches and finished labels for import product. One copy will be distributed to the office of the import inspector for each port requested. One copy will be distributed to the importer or agent submitting request for approval.

7. Distribution of disapproved sketches or finished labels and correspondence by the Technical Services Division.

a. General instructions.

(1) One copy will be retained in the files of the Meat Labels Group of Technical Services Division in Washington. Remaining copies will be returned to establishment or firm, along with correspondence regarding action taken.

Copies of correspondence will be forwarded to the Officer in Charge.

8. Maintenance of label files at field station.

a. Label files will be maintained only in the Meat Inspection office at the establishment. Files will be maintained as required by Section 317.60 of this Manual.

317.38 If the Technical Services Division stamps an addition on labels that are approved, it constitutes a condition or requirement that becomes a part of the approval.

317.39 Attention is directed to a difference in the marking and labeling requirements for imitation sausage. Since it is apparent what product is being imitated, it is sufficient to apply the single word "Imitation" directly on the product as set forth in Part 316, but Part 317 requires that the word be followed by the name of the sausage imitated and the statement of ingredients. Except that imitation sausage packed in properly labeled containers having a capacity of one pound or less, and of a kind usually sold at retail intact, need not bear the mark "Imitation" on each link or piece, provided no other marking or labeling is applied to each link or piece. The container should be labeled in accordance with Part 317 of the Meat Inspection Regulations.

317.40 Where certain fixed minimum or maximum quantities of particular ingredients are prescribed in the composition of designated product, it is the responsibility of the inspector in the department to obtain strict adherence to the requirements. Laboratory analysis may be obtained when necessary. The ingenuity of the inspectors may be taxed at times to determine the percentage requirements. It entails a thorough knowledge of the product and its preparation. Company figures alone should not be relied on.

317.41 If the term "bacon" is used to describe a product other than the conventional item prepared from the side of a swine carcass, it should be qualified as to its origin in terms such as "pork shoulder plate bacon."

317.42 Product designated "Dry Salt Cured" may contain a curing solution that was injected directly into the tissues but not through the circulatory system before it is covered with dry curing mixtures. It may be momentarily moistened to facilitate initial salt penetration. However, the term does not apply to product placed in curing solution. Product identified as "Dry Cured" should not be injected with curing solution or processed by immersion in a curing solution.

317.43 Tongues and brains of sheep and lambs are practically indistinguishable and may be designated either sheep tongues or lamb tongues and sheep brains or lamb brains. Large calf livers and hearts may be designated beef livers and beef hearts.

317.44 Gelatin is not a permitted ingredient of sausage, luncheon meat, meat loaves, and the like.

317.45 There is a clear difference between a loaf prepared with meat to the exclusion of meat byproducts and labeled as meat loaf, beef loaf, pork loaf, or similar name and a comparable product fabricated from various combinations. Nonfat dry milk and soya flour must be declared as part of the name of the product as well as included in the list of ingredients on a label for a product called "meat loaf," "pork loaf" or the like. The word "loaf" refers to a form in which the product is prepared rather than to a specific article of food, and when used to designate a product, it must be followed by the list of ingredients.

317.46 "Chopped beef" should consist of chopped fresh beef without the addition of beef fat as such and the product should not contain more than 30 percent of fat.

317.47 Ham cooked in the conventional manner, which does not include the use of boiling water, should be labeled "cooked ham" not "boiled ham."

317.48 When the term "shankless" is used in reference to a ham, it indicates the shank has been removed by means of a cut through the joint at a right angle to the femur bone. The distal tip of the semitendinosus muscle may be severed above its tendinous attachment leaving an extension approximately two inches in length. This extension is considered to be an integral part of the body of the ham and is usually folded over the end of the femur.

#### 317.49

A. "Detached skin" refers to portions of skin from which most of the underlying fat has been removed, such as skin removed from bacon intended for slicing and skin removed in the process of closely skinning hams, shoulder cuts, and fat backs. If the removal of portions of skin is incidental to the removal of a considerable proportion of the underlying fat from the ham, shoulder, back or the like, preparatory to the rendering of such fat, then the portions of skin so removed should not be regarded as detached skin and may be included with the fats and rendered into lard. Ham facings are not regarded as detached skin.

Fresh ham skins, fresh pork shoulder picnic skins, and the like may be used in the rendering of lard when, taken as a lot, they have at least 65 percent of trimmable fat.

B. "Tails" mean the skin-covered portion only.

C. "Windpipes" include the larynx, trachea, and bronchi.

D. "Scrap fat" includes particles of tissue such as may be collected as a result of splitting the carcass, sawing the carcass or parts, and washing blood-stained parts. It does not include fatty tissues of the thoracic, abdominal, and pelvic cavities, the trimmable fat attached to the organs in such cavities, or the particles of fat that may be scraped from the surfaces of the three cavities, provided the fatty tissues are reasonably free from muscle tissue, blood, and large blood vessels.



## Section 317.49(D)

Fresh, clean, sound fat obtained in the fleshing of fresh pork skins may be rendered for lard.

E. "Skimmings" include unrendered fatty tissues and rendered fat such as may be collected from receiving vats under rendering tanks or from cooking vats.

F. "Settlings" include "bottoms" such as accumulations of "scrap," water, and other material and the rendered fat therewith from receiving, settling, and storing vats.

G. "Pressings" include the following:

1. Fat pressed from the residue incident to rendering lard, other than by steam rendering, may be regarded as lard if it is promptly made sufficiently free of sedimentary scrap and water. Fat pressed from residue incident to rendering lard, including steam rendering, shall not be rerendered for lard-making purposes. Such fat may be re-rendered for rendered pork fat-making purposes.

2. Fat pressed from the residue incident to rendering rendered pork fat, and fat pressed from the residue incident to rendering lard, may be regarded as rendered pork fat if it is promptly made sufficiently free of sedimentary scrap and water. Fat pressed from the residue incident to rendering rendered pork fat may be re-rendered to make rendered pork fat.

### 317.50

A. Unpressed residue incident to rendering lard and rendered pork fat, other than by steam rendering, may be re-rendered for rendered pork fat-making purposes. Unpressed residue incident to rendering lard and rendered pork fat shall not be re-rendered for lard-making purposes.

B. Pressed residue incident to rendering open kettle rendered lard and open kettle rendered pork fat, which has not been pressed by means such as an expeller or a hydraulic press, may be re-rendered for rendered pork fat-making purposes. All other pressed residue incident to rendering lard and rendered pork fat shall not be re-rendered for edible purposes.

317.51 The term "refined lard" is applied to open-kettle rendered, prime-steam, or dry-rendered lard that has been run through a filter press with or without the addition of a bleaching agent.

317.52 When the term "manteca" or "manteca pura" is used as a name of a product, the English designation "Lard" or "rendered pork fat," as the case may be, should follow in close proximity.

317.53 The terms "chili" and "chili con carne" may be used synonymously and the terms "chili with beans" and "chili con carne with beans" may be used synonymously.

Tripe and untrimmed cheeks are not customary ingredients of chili con carne. Although beef heart meat is permitted in chili con carne, beef hearts are not.

To insure adequate identification, the following names will be used for the "Beef Heart" product described:

- A. "Beef Hearts" - untrimmed with bone intact.
- B. "Beef Hearts - Bone Removed" - untrimmed with bone removed.
- C. "Beef Heart Meat" - beef hearts with auricles (heart cap) and bone removed.

317.54 Pork stomachs, pork skins, pork snouts, and other meat byproducts, except fat, are not customary ingredients of a product labeled "Braunschweiger." The name "liver sausage" is inaccurate for a product prepared with meat byproducts to the exclusion of meat.

317.55 For an inspector to exercise proper inspectional control over the labeling of meat and meat food products, it is necessary that he have a clear understanding of the applicable Regulations and be thoroughly familiar with the preparation and composition of each product prepared under his supervision.

317.56 The name used to designate an article should be the common name, if any, and one which clearly describes the finished product; for example, a product labeled "beef and gravy," "pork and gravy," "pork with barbecue sauce," "meat balls with gravy" or the like should contain more meat or meat balls than gravy or sauce in the finished product. If upon examining representative samples of the finished product the inspector finds more gravy or sauce than meat, names such as "gravy and beef," "gravy and pork," "barbecue sauce with pork," and "gravy with meat balls" would be accurate and informative.

317.57 The statement of ingredients should show the ingredients listed in the order of their percentages according to the amounts used in preparing the product rather than in the order of predominance in the finished product. For example, cooked sausage may contain 10 percent added water; however, it is customary to use a greater amount of water in its preparation. In such case, water should be declared in the statement of ingredients in the order of its predominance by comparison with the other ingredients.

317.58 Potted and deviled meat food product should not contain added moisture, but when water is used to replace the moisture lost incident to precooking some of the meat or meat byproduct ingredients, then water constitutes an ingredient of the product and should be declared according to the quantity used.

317.59 It is the responsibility of the inspector to see that all meat and meat food products prepared under his supervision are properly labeled.

317.60

A. A uniform label filing system to aid inspectors wherever assigned is outlined below. Labeling and marking material should be filed in regular filing cabinets as follows:

1. A separate file is maintained for each official establishment.
2. The material is filed in chronological order with the last approval in front.
3. The files are subdivided alphabetically with material filed under the appropriate letter according to the name of product; For example, under B -- bacon, bologna, brains, braunschweiger, ground beef, corned beef, pork shoulder butt, beef and gravy; under C -- capocollo, cervelat, cutlets (pork, veal, etc.), chili con carne; under M -- luncheon meat, meat food product (potted, deviled, etc.); under P -- pepperoni, prosciutti, pudding (liver, tongue, blood, etc.); under S -- shortening, steaks, pork sausage, polish sausage, vienna sausage, soups; and under T -- tongue, thuringer, tails (pig, ox, and ox tail joints). Material that cannot be readily classified alphabetically is filed under "miscellaneous." Very few items should fall in this class. No other subdivision of the file is necessary, and no distinction is made in the various types of labeling material, such as inserts, wrappers, brands, etc. All correspondence pertaining primarily to labeling or marking devices should be filed with the material with which it is concerned. If a letter concerns more than one label, a cross reference is noted on the label.
4. Labeling and marking material that has been granted approval for a limited period is filed separately from regularly approved material in order to facilitate removal from the files at termination of approval period.
5. Material approved in sketch form is filed separately from regularly approved or limited approved material. To keep the number of sketch approvals on hand to the minimum, sketches should be discarded when finished material prepared in accordance with the sketch is approved.
6. No card or other index system is necessary when labels are filed under the above system.
7. Each official establishment office is furnished SRS-6 (10-1-62), Meat Inspection Label Cards, for the approved labels being used by the establishment and from time to time this office will send to the official establishment office additional SRS-6 (10-1-62) cards to cover recently approved labels.
8. To rescind an approved label, the management of the establishment needs to mark an "R" on the corresponding SRS-6 (10-1-62) card and return it to the Officer in Charge, who will forward it to the Technical Services Division. This should be done as the labels become obsolete. Do not submit lists of labels to be rescinded, as we need the IBM cards in order to pull our corresponding IBM Filmsort cards from our files. Where a packer maintains a duplicate file of approved labels in its central office the SRS-6 (10-1-62)



cards may, at the request of the management of the establishment, clear through that office. However, the Officer in Charge should know what labels are being rescinded.

Exception: SRS-6 (10-1-62) cards covering labels with temporary approval should be destroyed as the time limit expires.

Whenever an SRS-6 (10-1-62) card covering an obsolete label is returned to the Technical Services Division, the label is to be considered as rescinded. When sufficient SRS-6 (10-1-62) cards have accumulated to warrant making tabulations on our IBM machines, rescinded lists will be mailed to the stations.

9. At small establishments, such as slaughtering plants where only a few marking and labeling devices are used, it is generally satisfactory to file all approved material chronologically in one jacket without subdivisions.

10. Mounting of labels, inserts, etc., on thin manila or cardboard sheets, 11-3/4 by 9 inches or 11 by 8½ inches in size, before filing, aids greatly in keeping the material in good condition and also makes an orderly and neat file. The approval number and date of approval can be written on the upper righthand corner of the manila sheet if it is not readily visible on the label.

The Officer in Charge should see that the label files in his Circuit are set up in accordance with the system just described.

317.61 The term "Veal Cutlet" denotes a single slice of veal taken from the round. The thickness of the slice can vary; however, combining several thin slices is not permitted when the term "Veal Cutlet" is used.

317.62 Monosodium glutamate and hydrolyzed plant protein may be used as ingredients of sausage, meat loaf and luncheon meat, as well as other products.

317.63 Monosodium glutamate or hydrolyzed plant protein may be used in products such as hamburger, chopped beef, cubed steak, and steak prepared from meat that has been molded after comminuting processes such as grinding, chipping, thin slicing, and the like.

317.64 The labels for meat food products containing monosodium glutamate or hydrolyzed plant protein should not show the word "artificially flavored" contiguous to the name of the product.

317.65 All questions relating to a product's amenability to the Federal Meat Act and the Regulations should be referred to the Technical Services Division for answer. Full information should be submitted including the method of preparation of the article, the ingredients used and their proportions, the name of the product, and a sample thereof if it can be obtained. Further information should be given relative to whether the article is intended for interstate or foreign commerce.

317.66 Product derived from carcasses of animals injected with papain such as liver, heart, tongue, cheek and head meat, trimmings, boneless beef, tenderloins, tails, tripe, and cuts of meat not showing an imprint of the roller brand reading "Tendered with Papain" shall be properly identified and kept separate from other product. When such product leaves the official establishment, the immediate container shall bear a label showing, in addition to other required labeling, a statement such as "Tendered with Papain" or "Treated with Papain" prominently displayed contiguous to the name of product. The kidneys must be segregated, keeping them properly identified to be used for animal food or tanked.

The establishment will furnish retail dealers handling such product with labels bearing the statement "Tendered with Papain" displayed in a prominent manner contiguous to the name of product for use by such dealers on consumer packages or product derived from the carcasses of animals injected with papain. Compliance and Evaluation personnel and other inspectors who may visit retail markets should observe the effectiveness of this phase of the labeling program. Should they find any retail outlets not following through with this identification, the facts should be immediately reported to the Technical Services Division.

317.67 It has been determined that the use of transparent or semitransparent wrappers or coverings bearing red lines, red scatter print, or other red graphic material in a manner so that the lines, print, or graphic material are positioned over the entire surface of the package gives a false impression of the color of certain products. This is contrary to the provisions of Section 317.8(c)(5) of the Meat Inspection Regulations.

Transparent or semitransparent wrappers or coverings as described above for use in packaging of cured, cured and smoked, or cured and cooked sausage products, and sliced meat food products must provide for at least 50 percent of the total product surface being visible through a wrapper or covering that is free of color, print, or graphic material, to insure that the actual color of the product is easily recognized.

317.68 When an artificial sweetener is used in curing hams or bacon, the product shall be marked and labeled to show its presence. A statement, such as "Sodium Cyclamate, an Artificial Sweetener Added" shall be prominently displayed contiguous to the name of the product wherever shown on the container. If an artificial sweetener is used along with sugar it will be necessary to show the presence of the sugar on the label in addition to the statement showing the presence of the artificial sweetener.

Director, Technical Services Div. Washington, D.C.		FOR USE OF THE WASHINGTON OFFICE, TECHNICAL SERVICES DIVISION		
For Approval (check one) Final      Sketch      For use until		RECEIVED STAMP	APPROVED STAMP	DISTRIBUTION STAMP
Date Sketch Approved      Est. No.				
Type of Material: Such as Casing Wrapper, Carton, etc.				
Formula and Method of Preparation				
Remarks:				
Sig. of Est. Representative      Date				
Officer in Charge      Date				



PART 318 - REINSPECTION AND PREPARATION OF PRODUCTS

318.1 When product has become unclean by accidental contamination and can be cleaned with water, care must be taken to see that pieces are promptly washed individually under a spray of running water. Separate equipment should be provided for this purpose. Use of hand-washing basins for cleaning product is not permitted. Unclean articles referred to in this paragraph must not be accumulated before or during the washing operation.

318.2 It may be necessary to heat or otherwise treat products that are suspected of having absorbed odors that are not readily discernible by usual methods of examination.

318.3 Unclean frozen product should be made clean in an acceptable manner before being defrosted in water or pickle. Care must be exercised to see that no loose material from containers is allowed to enter the defrosting solution.

318.4 All product that is condemned and destroyed for food purposes on reinspection should be reported on Form MI-407 so that the inspection requirements as well as the facilities necessary for disposal of condemned material can be determined. Unclean paunches, stomachs, chitterlings, and unrendered fat are examples of products that are frequently retained and the establishment decides to dispose of the material as inedible rather than spend the necessary labor to place it in acceptable condition. In such cases, the action taken by the inspector in retaining the product is equivalent to a decision that the product is condemned unless it is cleaned or otherwise made acceptable for food purposes. Such product should then be reported as condemned on reinspection. An estimate of the weight is acceptable.

318.5 Particles of bone in meat food products is a source of consumer complaints and should be guarded against by close inspection. Some of the products in which bones or particles of bone may be found include the following: Tongue trimmings, brains, cheek meat, hearts, trimmings derived from neck bones, ribs, vertebrae, and heads.

318.6

A. The large inverted hair follicles commonly seen in pork jowls must be removed before the product leaves the establishment or is used for further processing.

B. Pork jowls intended for use in fabricated products or in rendering should be completely sliced or deeply scored from the "Meat" surface downward in sections one inch apart longitudinally and the cut surfaces observed for any unacceptable conditions. Mechanical slicing of frozen jowls in blocks does not permit satisfactory examination. However, mechanical slicing of unfrozen jowls with acceptable inspection by a competent establishment employee of each cut surface immediately after slicing is satisfactory. Facilities should be provided for cleaning and sterilizing contaminated equipment.

318.7 Meat byproducts containing large amounts of skin, such as detached bacon rinds, pork snouts, lips and ears, shall not be shipped from the official establishment unless these products are free of visible hair roots and otherwise suitable for inclusion in the manufacture of meat food products such as souse, scrapple, head cheese, etc.

However, if the packages are marked to indicate the skins, pork snouts, lips or ears are intended for rendering or gelatin manufacture, then freedom from visible hair roots will not be required.

### 318.8

A. Inspection of Boneless Meats at Producing Establishments. The establishment has the responsibility to present for inspection product that is clean and free of foreign material prior to cutting and boning carcasses and larger cuts. The establishment should designate an inspection area, located prior to the cutting and boning operation, equipped with adequate artificial light and tool and hand-washing facilities. The establishment should designate a competent employee to conduct close inspection to detect and remove foreign material from the carcass or parts prior to boning. The inspector must assure himself that this function is being satisfactorily performed in order that all carcasses and/or cuts are free of contamination, sound, and otherwise fit for processing. Any evidence of improper carcass-dressing operations or inadequate post-mortem inspection should be reported by the inspector to his supervisor.

The inspector shall conduct an inspection of all lots of boneless product after packing and prior to freezing, shipping, or processing. The inspection shall be conducted on a sample basis. The number of samples to be selected by the inspector for examination will be based on the number of production units in the lot. Each container in which boneless meats are packed is considered a production unit. Table I, which follows near the end of this paragraph, will be used to calculate the number of sample units for examination based on the size of the lot and experience in a particular establishment. Lot designations may be at the election of the establishment and may vary in size from containers of boneless meat derived from one or more carcasses to boneless meats derived from many carcasses over a day's boning production. Production units constituting a lot must be identified in a manner acceptable to the Officer in Charge so that the identity of units may be accurately and permanently maintained. Adequate facilities including light of 50 footcandle intensity and a suitable rust resisting metal table for the examination of samples shall be provided by the establishment. Care must be exercised by the inspector to select at random samples throughout the entire production lot. In those cases where sample examination of a given lot indicates the product is contaminated, all products represented by the sample must be retained and reconditioned by the establishment before freezing or shipping. All samples must be examined and a record of each defect noted before final determination of the acceptability of the lot is rendered. After reconditioning of the rejected lot, the inspector must again conduct sample inspection as outlined above. Should the lot again be rejected because of contamination or unsoundness, the lot shall again be reconditioned by the establishment and

## Section 318.8

100 percent inspection of all units in the lot will be conducted by the inspector before the lot is released. Sample units examined by the inspector shall be identified by application of the inspector's initials to the container.

Table I establishes sampling plans for normal, tightened and reduced inspection. All sampling will start with the normal sample plan. The tightened sampling plan shall be instituted after examination of ten lots, if more than three lots have been rejected. Normal sampling may be instituted if there have been no lots rejected in the ten consecutive lots examined under the tightened plan.

Reduced sampling may be instituted at the discretion of the supervisor or Officer in Charge provided the preceding ten lots have been under normal inspection and none have been rejected. Normal sampling will be reinstated if a lot is rejected.

TABLE I

Production Units	Plan I Reduced	Plan II Normal	Plan III Tightened
10-20	1	2	4
20-30	2	4	8
30-50	3	6	12
50-70	4	8	16
70-100	6	12	24
100-150	8	16	32
150-200	10	20	40
200-250	12	24	48
250-300	14	28	52
300-400	16	32	64
400-450	17	34	70
450-500	18	36	72
500-700	20	40	80
700-1,000	22	44	88

When the production units are unusually large, such as gondola trucks, a representative sample proportionate to the above plan may be examined.

Form MI-404-4, Report on Reinspection of Boneless Meat, will be maintained by the inspector as a record of boneless meat production within the establishment. Inspectors assigned to boning operations will report any time of 15 minutes or more for sealing containers or vehicles in the "Remarks" column of Form MI-404-4.

B. Sealing Containers. That part of the Regulations, Section 325.6, that requires 25 percent or more of the contents of a car to be unmarked before sealing is permitted would not apply to the sealing of boneless manufacturing meats for compliance with this section.



1. Proper application of wing seals to shipping containers shall be determined by examining at random an adequate number of sealed containers.

a. Fiberboard containers. Containers of this type may be wrapped lengthwise or girthwise with filament tape and the wing seal applied at the point where the two ends of the tape overlap. The ends of the tape should overlap at the end of the container.

b. Barrels. Slack barrels and metal barrels of boneless meats may be sealed provided the boneless meat is in a closed polyethylene film liner. After filling the container, the polyethylene film is "bunched" at the top. A heavy cord or filament tape shall be threaded through the "bunched" point and wrapped around the neck of the bag and tied or overlapped at the ends. The knot of the tie or the two overlapped ends shall be enclosed in the wing seal.

c. The inspector shall maintain security of wing seals as follows:

(1) Maintain records, suitable to the District Director, of receipt of shipments of seals.

(2) Be assured that wing seals and truck seals on hand in the establishment are under adequate security at all times.

(3) Maintain a record, suitable to the District Director, of the inclusive numbers of the wing seals applied to each lot.

2. Sealing vehicles containing boneless manufacturing meat destined for approved warehouses.

a. Company seal shall be used. Application of the seal to the vehicle shall be under supervision of the inspector. The inspector will modify Form MI-408 to show the company seal number.

b. Company shall provide a weather resistant warning tag, with black ink, with the following statement: "This seal shall be broken only by a designated employee of the warehouse as approved by the Processed Meat Inspection Division of the U. S. Department of Agriculture."

c. The inspector will distribute Form MI-408 as follows:

(1) Original to the Officer in Charge in the Circuit at the receiving warehouse.

(2) Copy marked "inside sealed car" shall be so placed.

(3) Copy marked "origin station" to the Officer in Charge of the Circuit in which the producing establishment is located.

(4) Copy marked "origin establishment" retained at origin establishment.

3. Sealing vehicles containing boneless meats destined for official establishments.

a. Government seal and warning tags will be used.

b. MI-408 will be used and distributed as directed on the form.

C. Control of Product Entering Federally Inspected Establishments. Inspectors must be alert to recognize, intercept, and properly handle product offered for entry into official establishments which might not, in fact, be federally inspected. Inspectors should make a critical review of their own procedures to safeguard against any such product entering establishments under their jurisdiction. Although boneless meat (particularly beef and veal) presents our most serious immediate problem in this area, all product entering an official establishment must be eligible. Official establishments preparing boneless meats for shipment in fiberboard boxes or similar type of containers should be encouraged to use the printed inspection legend.

1. Establishment Responsibility. Official establishments and inspectors have the responsibility to look behind the marks of inspection in the acceptance of incoming product to verify shipments as actually being "U. S. Inspected and Passed" as marked. The basis for the inspector's review must be the background information concerning the shipment. The establishment shall furnish the inspector with all pertinent information on incoming shipments of boneless beef and veal before or at the time these shipments are received in the official establishment. This would include the identity of the shipment, such as the amount of product, size of container, and name of the supplier from whom the official establishment purchased the product (including the broker if one is involved). Shipments arriving during the absence of the inspector may enter the establishment providing the identity is properly maintained and the product is inspected before being used.

2. Inspector's Responsibility. The inspection of incoming product will be made at time of receipt into the establishment. The defrosting of samples is not necessary where sealed shipments are involved unless there is an indication of contamination or unsoundness. If the product is frozen, the part to be examined shall be defrosted.

3. Inspection Procedures. While samples are being defrosted, the remaining product may go into storage. Product in blood-soaked, broken and mutilated containers showing an unusual amount of damage is to receive 100 percent inspection including defrosting. The inspector shall, in addition

to examining the product for contamination, watch closely for evidence of mislabeling with reference to species origin. The inspector should be suspicious of bruised, blackened, or excessively bloody meat; this may be an indication that the animals from which the meat is derived died other than by slaughter. Boneless meats in fiberboard boxes with a domestic meat label rather than a printed mark of inspection should be checked closely. Other factors which the inspector should note are the box maker's marks and identification; the domestic meat label, if used, should be an exact facsimile of the approved domestic meat label; quite often there are minor defects in the illegally printed meat labels.

As an aid in checking the authenticity of the domestic meat label and the 2½-inch rubber brand for imported product or that produced under the Identification Service, inspectors should be urged to use plastic overlays. Careful judgment must be rendered in using the overlay when comparing domestic meat labels. The Labels, Standards and Packaging Branch of the Technical Services Division has approved labels with slight deviations due to the difficulty of printers in duplicating the print which the Regulations specify. However, the indentation, wording, and line relation should be exact. Any deviation other than minor in nature should be viewed with suspicion. The 2½-inch rubber brand should be an exact facsimile of the reprint on the plastic overlay.

4. Action to be Taken by the Inspector. When the examination of the product indicates packing or conditions that are inconsistent with federally inspected product, this should serve as cause for alarm and further action by the inspector. When illegitimate shipments are suspected, they should be immediately reported to the Officer in Charge who will promptly bring it to the attention of the appropriate Area Office of the Compliance and Evaluation Staff. All product in the lot should be retained. When product is being unloaded, it is well to delay preliminary examination until the shipment has been unloaded from the truck, but before it is released for use within the establishment. Then, if the shipment is found to be questionable, it should be retained. Pertinent information available to the inspector should be noted, such as the description of the truck, license number, etc.

5. Supervisor's Responsibility. To assure himself that the inspectors are properly performing their reinspection duties, the supervisor should examine samples of product previously examined and released by inspectors about once a week or more often as necessary.

D. Reinspection of Boneless Beef, Veal and Mutton Entering Federally Inspected Establishments. Domestic boneless meats intended for use in comminuted products received in official establishments shall have been deboned either under Federal meat inspection or under Identification Service. This is intended to include boneless carcass meat, boneless chucks, and mixtures of wholesale cuts in the same container. This does not apply to other boneless wholesale cuts, such as inside or outside rounds, knuckles, loin strips, plates, navels, clods, briskets, flanks and tenderloins.



1. Inspection Supervision. In the administration of operations under the Identification Service, close attention shall be given to sanitation, marks of inspection, proper facilities for the operation being conducted, and to the application of ID brands to carcasses to be deboned. The supervision of the actual boning operations may be done in conjunction with other duties providing only federally inspected and passed beef, veal or mutton is handled on the premises. The same degree of attention should be given to this type operation as would be given in a federally inspected establishment. Under this kind of supervision of boning operations in an ID establishment, only ID marked product will be accepted for packing under the Identification Service.

The acceptance of sealed vehicles, the breaking of seals, and the application of seals will be permitted under the Identification Service at locations having the Identification Service.

Inspected and passed imported product must move under the same kind of control from the point of inspection to the federally inspected establishment to be eligible for use without additional reinspection.

2. Reinspection shall be required as follows:

a. Category I  
Product Eligible for Use With Normal Reinspection

Product received under United States official seal or approved warehouse seals and accompanied by proper certification in good condition may be received into the official establishment; otherwise it shall be handled under Category II.

b. Category II  
Product Requiring Additional Reinspection

Product from an official establishment, from an outside freezer, produced under Identification Service or imported boneless manufacturing meats which are not received under seal shall be reinspected as follows:

(1) The number of sample containers in a lot (not to exceed one truck or carload) will be selected for reinspection as indicated under Plan I, Table I, of Paragraph "A" in Section 318.8 of this Manual.

(2) The samples of product shall be defrosted sufficiently and piece-by-piece inspection shall be made by the inspector.

(3) If the product is not in compliance with the Regulations or any questionable conditions are observed under Plan I, the inspector will increase the size of the sample as provided in Plan II.

(4) The inspector shall require 100 percent reinspection of the lot when sample findings under Plan II reveal product to be in violation of the Regulations or otherwise in unsatisfactory condition.

(5) The contents of all cartons which show excessive soilage, soaking or unusual damage must be reinspected.

3. Defrosting Samples. In the defrosting of frozen boneless meats which is required when the product is not certified into the establishment, it will be acceptable to defrost a selected portion taken from the frozen blocks of meat. This cut should be not less than 4 inches wide and be the entire width or length of the block at a point determined by the inspector. The examination of the defrosted meat from this section will be accepted as representative of the unit. Defrosting in a waterproof bag in warm water is acceptable.

4. Temporary Storage. The requirements for defrosting in Category II are not applicable to lots of product entering an establishment for temporary storage only and for further distribution in the original package. An example of this would be an inspected warehouse receiving packaged boneless beef for distribution to retail stores in the original containers. Naturally, an acceptable system of control and identification must be set up by the establishment.

5. Laboratory Sampling. Where the history of a lot is incomplete or the findings of the inspector on initial reinspection are unsatisfactory, a representative sample of not less than one pound shall be submitted in a frozen condition to the Microbiology Laboratory in Beltsville for species identification and for such other examination as may be indicated. This product shall not be released until the results are known.

6. Holding Product Pending Reinspection. Shipments arriving during the absence of the inspector may be unloaded if a place acceptable to the Officer in Charge has been provided that effectively separates it from other product. Such facilities shall positively maintain the identity of such product pending reinspection. The establishment shall immediately notify the inspector of such receipt, including such information as the inspector requires to positively identify the shipment.

7. Reporting. Report on boneless meats for use in manufacturing processes, Form MI-404-5, is to be prepared daily by the inspector. Entries should be made as shipments are received according to the instructions contained on the form. The completed form is to be mailed to the District Office at the end of each week.

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The requirement that Form MI-404-5 is to be completed weekly should not be interpreted as meaning that the reporting of any suspicious product or conditions is to be delayed until the end of the week. If conditions exist that cause suspicion, the inspector will retain the shipment, obtain all pertinent facts and refer the matter to his supervisor. After all possible facts relative to the matter have been obtained by the supervisor and there is still reason to question the validity of the shipment, the matter should immediately be reported to the District Director's office.

318.9      Criteria for Approved Warehouse. A warehouse will be approved for receiving, storing and shipping boneless manufacturing beef, veal and mutton if it is a public refrigerated warehouse and the operator thereof applies, qualifies, and agrees to pay for Identification Service under the regulations in 9 CFR Part 340. Provided, however, that the service shall consist of such supervisory inspection of premises, inventory, records and operations of the approved warehouse as is deemed necessary by the Processed Meat Inspection Division. The fees and charges shall cover only the cost of such supervisory service.

A.      Facilities. Identification Service will not be furnished at any warehouse if the facilities or operating practices are such that the articles handled thereat may become unsanitary, unwholesome, or otherwise unfit for human food, or improperly marked or labeled.

B.      Control and Identification of Lots. As a condition of approval, the warehouse operator must comply with the following:

1. Segregate by lot number and location federally inspected meat and meat food products from other articles in the warehouse in such a manner as to prevent inadvertent substitution of other meat products.

2. Stamp or otherwise identify each lot of properly marked boxes of boneless beef, veal, mutton and lamb received under company seal from a federally inspected establishment or an ID establishment. The shipment must be accompanied by Form MI-408 or proper warehouse certification as outlined in Paragraph "E."

3. Allow such a seal to be broken only by an authorized employee of the approved warehouse acceptable to the Officer in Charge.

4. Maintain records for each lot of boneless meats shipped from an approved warehouse to an official establishment or approved warehouse.

C.      Authorized Employee. The approved warehouse operator must designate one or more of his employees acceptable to the Officer in Charge to break seals of vehicles carrying boneless meat from a federally inspected establishment, ID establishment or import shipment. This permission is limited to breaking company seals on trucks and railroad cars containing boneless meats in packages marked "U. S. Inspected and Passed." Such product is received at the warehouse for storage and continued special identification as federally inspected product.



The management of the warehouse should be informed that breaking of seals by their employees where such action is not specifically permitted will result in withdrawal of the approval of the warehouse for storage of "sealed" boneless meats.

D. Records and Certification of Incoming Shipments. With respect to the receipt of certified boneless meat at an approved warehouse, the following record will be maintained for each lot:

1. Date of arrival.
2. Carrier.
3. Shipper and his official establishment or ID number, or approved warehouse ID number; for imported meat, name of shipper or importer.
4. Warehouse customer of record for whom the meat is stored.
5. Stated description of meat.
6. Quantity in the lot received.
7. Warehouse lot number.
8. Inbound official or approved warehouse seal number.

E. Records and Certification of Outgoing Shipments. With respect to the shipment of boneless meat from the approved warehouse to the official establishment, the following record will be maintained for each lot:

To: United States Department of Agriculture Consumer and Marketing Service Processed Meat Inspection Division	1. Date	2. Certificate No.
This is to certify that the meat products described herein are of a lot or lots received from an official establishment or other official source described herein under unbroken seal, and the identity of such lots has been maintained, and the meat products described herein have not been deboned or otherwise prepared or repackaged or relabeled while in the custody of this approved public warehouse.		
3. Consignee	9. Name and No. of official source from which product originated	
4. Description of Product	10. Name of Carrier	
5. No.'s and Types of Containers	11. Approved Warehouse Seal No.	
6. Total Weight	12. Name and No. of Approved Warehouse	
7. Warehouse Lot(s) or Number(s)	13. Date of Shipment	
8. Other Marks of Identification (Include pertinent identification marks and import code numbers, if any.)	14. Title and Signature of Authorized Employee	

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The approved warehouse employee signing the certificate must be one who has been previously designated as acceptable to the Meat Inspection Program. This certificate should be printed by the approved warehouse and completed in triplicate. Two copies are to accompany the shipment and one copy will remain with the files which are routinely surveyed by a Meat Inspection employee. The receiving inspector will return one copy to the Officer in Charge of the Circuit having the responsibility for surveying the approved warehouse from which product originated. The returned copy will be used by the responsible Circuit to maintain constant familiarity with shipments certified from the approved warehouse and as a check against the records required to be kept by the approved warehouse.

Approved warehouse seals covering shipments of boneless meats are to be broken only under the supervision of a Meat Inspection employee when used to certify product entering an official establishment. So as to preclude house employees from inadvertently breaking these seals, the approved warehouse may print warning tags to be attached to seals.

F. Penalties. Willful false entries in the warehouse records or willful false statements in the certificates and similar offenses are felonies subject to the penalties of 18 U.S. Code 1001. Criminal penalties are also provided for in the Agricultural Marketing Act (7 U.S.C. 1622(h)) and the Meat Inspection Act (21 U.S.C. 78, 79, 87, 88, 91) for specified offenses, including certain false representations and unauthorized use of official marks or other identification devices.

G. Withdrawal of Service. Approval of the warehouse may be canceled whenever the Administrator or his delegate determines, after opportunity is afforded to the warehouse operator to present his views, that reliance cannot be placed on the records or certificates of the warehouse operator or his employees or that such operator or any of his employees or agents acting within the scope of the employment or agency has failed to comply with any of the conditions of approval or has violated the Meat Inspection Act (21 U.S.C. 71 et seq) or Section 203(h) of the Agricultural Marketing Act (7 U.S.C. 1622(h)) or any of the regulations promulgated thereunder. Pending final determination such approval may be suspended summarily in accordance with Section 9 of the Administrative Procedure Act (5 U.S.C. 1008).

318.10 Ice glazing of frozen meat products, which usually consists of treating pork cuts by dipping in water or spraying them with water after they are frozen in a manner which will build up a coating of ice on the surface of the product, is a long-standing practice which has been conducted at storage freezers throughout the country. The procedure is not considered to be a processing operation and is therefore not required to be performed in official establishments.

Ice glazed product may be received into official establishments if it can be identified as inspected and passed. When received as inspected product, careful inspection should be made to determine if any soiling or otherwise unsatisfactory condition is present, and proper reconditioning must be required

before other handling is permitted. Generally, reconditioning can be satisfactorily accomplished by washing the outer surface under a spray until the ice disappears.

### 318.11      Preparation—General

A.      Establishments are responsible for preparing all products in compliance with applicable regulations. Whatever controls are necessary to obtain such compliance must be placed over the manufacturing processes. The following control measures have been found effective:

1. Use a specific tested formula for each product and require strict adherence to the formula. If it is necessary to deviate from a formula which is known to produce a product in compliance with the Regulations, the establishment should expect to carefully work out such deviation with the inspector before regular production is started.

2. Require accurate measurement and positive identification of all ingredients going into the manufactured product.

3. Use specific tested cooking and smoking practices that are known to produce a product in compliance with the Regulations.

4. Provide positive identification of product through the manufacturing processes and assure correct marking, labeling, or both, with approved materials.

5. Frequently check the weight of the finished product against total amount of ingredients used.

6. Provide responsible supervision in the processing department to see that the controls are effective at all times.

B.      Water holding capacity of product during smoking and cooking may be affected by one or more of the following: Use of high speed emulsifying grinders, longer chopping times in improved sausage fabricating equipment, inclusion of pork skin (unskinned pork jowls), or the use of dry ice in chopping operations.

1. When an establishment adopts these or other new methods of manufacturing cooked sausage, such as frankfurters or bologna, the inspector should undertake frequent samplings for laboratory analysis. Sampling should be continued until a standardized method of preparation has been established which will produce a sausage that does not contain excessive added water.

2. After an acceptable standard method of manufacture has been established, occasional check samples should serve to point up any needed adjustments. Naturally, when the method of preparation is changed or when significant formulation changes are made or whenever there is any reason for the inspector to suspect that the finished product is in violation of the Regulations, samples should be taken frequently to assure that only product which is in compliance with the Regulations is distributed.



C. The inspector has the responsibility of determining that all products prepared under his supervision comply with applicable regulations. To accomplish this effectively he must:

1. Have a thorough knowledge of the formulas and manufacturing processes used in preparing each product. To obtain this information, the inspector will observe the formulation of the product and manufacturing processes sufficiently to become thoroughly familiar with the practices used by the establishment.

2. Require such controls by the establishment as will result in all product manufactured being in compliance with applicable regulations concerning composition and correct marking and labeling.

3. Be certain that all products within the area of assignment is prepared with appropriate formulas and by methods that will result in compliance with the Regulations.

4. Know that all ingredients used in the preparation of products are wholesome and acceptable.

5. Permit the distribution of product that is in compliance with the Regulations and retain any product that is not. This action must be based on actual knowledge of the preparation of the product. Samples of such products shall, of course, be taken for laboratory analysis, if such analysis is deemed necessary.

6. Require changes in formula when necessary to yield a product in compliance with the Regulations.

7. Collect such samples for laboratory analysis as are necessary to determine whether changes in manufacturing practices are needed to assure compliance with the Regulations.

D. The supervisor has the usual responsibility to determine that the inspector working under his supervision performs effectively in the area of his assignment. To accomplish this the supervisor should:

1. Understand thoroughly the controls used by the management of the establishment to assure that all product manufactured is in compliance with the Regulations.

2. Understand thoroughly the inspection supervision given to the manufacturing processes by the inspector.

3. Collect check samples for laboratory analysis at irregular intervals to determine the effectiveness of the control program used by the establishment and the supervision given by the inspector.

E. The responsibilities of the establishment, the meat inspector, and the supervisor are clearly outlined in the foregoing paragraphs. Any inspector or supervisor who fails to fully assume his responsibilities or fails to require the establishment to prepare products in compliance with the Regulations will be considered for such action as deemed necessary to obtain full enforcement of the Meat Inspection Regulations.

318.12 Favorable decision by the Technical Services Division with respect to any new article or material offered for use at an inspected establishment does not relieve the local inspector of his responsibility to see that it is suitable for the purpose intended and is properly used.

The manufacture of equipment, or the distributor of such materials as detergents, insecticides, rodenticides, plastics, lacquers, and the large variety of probable ingredients of meat food products, usually desires to have the Officer in Charge and the Technical Service Division determine the suitability of the particular article for use under Federal meat inspection. In fact, it is necessary that the Technical Services Division review proposals to use such new articles and materials so as to maintain a high degree of uniformity in applying our requirements throughout the meat packing industry. In reviewing these proposals, the Technical Services Division determines their suitability under existing regulations and requirements and endeavors to ascertain whether their use by an inspected establishment will or will not create an objectionable condition. Frequently, arrangements are made for a trial before final decision is made.

Even though the Technical Services Division makes every effort to determine the suitability of a new product, a favorable decision does not constitute blanket endorsement. Final determination with respect to its use in any particular plant is the responsibility of the local inspector. The decision by the Technical Services Division that any article or material is generally suitable for use under Federal meat inspection constitutes assurance to the inspector that its use should be permitted so long as there is no local condition that would indicate otherwise. It is the inspector's responsibility to make this local determination and to inform the Technical Services Division of adverse findings.

### 318.13

A. Hardwood or hardwood sawdust alone or in combination with redwood or redwood sawdust is acceptable for smoking. The resinous woods are unacceptable for smoking. Redwood is not a resinous wood.

B. The use of steam in smokehouses is permitted, but a combination of steam and smoke is not. The amount of steam should not be so great that its use will result in excess condensation and consequent dripping.

318.14 Crushed or ground bone as such is not to be used as an ingredient of a meat food product. This does not preclude the use of bone in the manufacture of soup stock which is intended as an ingredient of a meat food product. The bone-crushing operation may be conducted in the edible products department provided that the handling of the bones and their preparation do not create an unsanitary condition or in any way interfere with inspection or preparation of meat food products, and that only clean sound bones derived from U. S. Inspected and Passed carcasses are used.

318.15

A. Cured, unsmoked, boneless pork shoulders or pork shoulder butts in casings or similar wrappings in consumer-size packages do not have characteristics associated with pork products which would be eaten without further cooking; accordingly, treatment of such product to destroy possible live trichinae shall not be required in official establishments.

B. Cured products of this kind in consumer-size packages shall not contain more than 10 percent added moisture as a result of the curing process.

318.16 All materials such as curing mixtures, seasonings, spices, tomato puree, cereals, nonfat dry milk, and the like, should be labeled to show the name of the article, list of ingredients if composed of two or more ingredients and the amount or percentages of restricted ingredients. In addition, the materials should be enclosed in a sanitary container and should show the name and address of the manufacturer. Inspectors should reject materials that do not comply with these requirements. When a material meets these requirements and is one that has been approved for use in meat food products, the inspector should make the usual examination for acceptability. Where a laboratory examination of the material is considered necessary, a sample form should show the complete identity of the material.

318.17 Nonfat dry milk has been approved for use with proper declaration in sausage and meat loaves. Dried buttermilk and calcium caseinate have not been approved for use in meat food products. Mixtures of nonfat dry milk with other substances except as a minor ingredient of complex mixtures such as gravy or breading mix are not acceptable.

318.18 No mixture containing albumin from inedible material has been approved for use in meat food products. Dried whey (food grade) conforming to the standard adopted by the Technical Services Division and sodium caseinate have been accepted for use in the preparation of loaves (other than "Meat Loaves"), stews, soups, and imitation sausage. Dried whey and sodium caseinate should not be accepted into official establishments when mixed with other substances except as a minor ingredient of complex mixtures.

The importance of adulteration with sodium caseinate in sausage and meat loaves is due not only to the use of an unacceptable ingredient, but because of its high protein content it facilitates adulteration of product with water.



Inspectors should develop and enforce specific control measures to prevent use of sodium caseinate in sausage and meat loaves. The control measures should be designed to operate effectively considering the facilities and method of operation of each sausage department. The basic features of the control should include:

- A. A continuous inventory of the amount of sodium caseinate on hand in the establishment and the amount used daily.
- B. A determination that seasoning materials are not adulterated with sodium caseinate.
- C. Sodium caseinate is not brought into the establishment under another name.
- D. A daily balancing of the amount of product which legitimately contains sodium caseinate and the amount of this material actually used.
- E. Occasional requests for sodium caseinate analysis in samples submitted for laboratory examination.

Meat Inspection supervisors should assist inspectors when necessary in developing adequate controls and assure themselves that such controls are continuously in effect. When inspectors are rotated on assignments, care should be taken to see that the control procedure is understood and operated effectively by the new inspector.

318.19 Lye solution for removing the outer surface of vegetables is permitted provided the lye solution is completely removed before the vegetables are processed further.

#### 318.20

A. Salt containing approved kinds and quantities of an anticaking agent may be used. These agents are usually tricalcium phosphate, calcium carbonate, or magnesium carbonate, used singly or in combination. However, this permission does not cover the use of these agents as such in meat food products.

B. Salt which comes in contact with meat or product should be clean and free from extraneous materials, including rock or slate particles normally found in rock salt. The commonly used recrystallized or vacuum-pan granulated salt, with or without anticaking agent, is acceptable for this purpose.

C. Salt solutions used for curing, defrosting, or for wetting cloths prior to application to dressed carcasses should be clear. The salt used to prepare the solutions should be free from extraneous material which indicates contamination with filth but may contain insoluble mineral matter such as slate or rock particles.

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D. Salt should be handled so as not to become soiled. Bins or other facilities for the storage of salt should be constructed in a sanitary manner so they may be readily cleaned and will protect the salt from contamination.

E. The equipment used for preparing salt solutions should be of sanitary construction and should be maintained in clean condition to avoid contamination of the solutions.

318.21 The congealing property of gelatin restricts its use in meat food products to those in which it would normally be an expected ingredient such as souse, jellied beef loaf, canned whole ham, etc. It may also serve as a coating for such products as cooked ham and loaf products. However, it is not an acceptable ingredient of sausage.

318.22 Glycerin may not be added to product.

318.23 The Regulations provide for the addition to products of nitrates of sodium or potassium as well as nitrites of sodium or potassium. The desirable action of the nitrates on or in products is contingent upon their conversion to active form as nitrites. Therefore, the addition of nitrates is limited to that amount which under normal conditions will not by conversion of the nitrates into nitrites result in the presence of nitrite in excess of the amount permitted in the Regulations. Addition of excessive amounts of nitrates serves no useful purpose and is not permitted.

When commercial curing compounds containing nitrites are received, they may be released for use in the official establishment only if the manufacturer has indicated on the container that a sample of the lot from which this compound was derived was chemically analyzed and found to be acceptable and within the nitrite limitations on the label. In the absence of this kind of certification, the inspector will not permit the entry of such curing compounds onto the official premises.

This does not change the traditional sampling applied by the inspector to assure acceptability of the curing compound. In order to fully exercise his responsibilities, the inspector must periodically submit to the Meat Inspection Laboratory samples of shipments of curing compounds even though certified as described above. The laboratory determines the acceptability of mixtures containing nitrates, nitrites, or combinations of these, which are compounded for use in official establishments. The laboratory will also furnish information to the inspector regarding the amount of such mixtures that may be used.

However, this amount will be based on the premise that the product will be pumped at 10 percent of green weight. If the establishment wishes to pump at other than 10 percent, the amount of the curing mixture must be adjusted accordingly. For example, if the establishment pumps 20 percent, the amount indicated by the laboratory must be divided by 2 since the ratio of 20 to 10 is 2 to 1.

318.24 When papain or other approved proteolytic enzymes in combination with or without seasoning materials are used on steaks and other meat cuts which are frozen or cooked within the establishment, the product should be handled in a manner that will control the action of the enzyme material. The solution should not be used in a manner that will result in adulteration of product and the presence of the enzyme material as well as other ingredients that are added must be shown in the ingredient statement.

The inspector is expected to check enzyme treated meats which are treated by the process of ante-mortem injection as well as by dipping or injection into the boneless cuts. To facilitate this test, the establishments preparing these products should install equipment to demonstrate tenderness in the treated product.

Approximately 4-ounce samples of enzyme treated and untreated diaphragm or other muscle are placed in waterproof plastic bags. The bags are placed in a water bath with a temperature of 60°C. (140°F.) when bromelin is the predominant enzyme, or 67°C. (153°F.) when papain predominates. A slight deviation in the water bath temperature does not affect the test. After four hours of incubation, the samples are removed from the water bath and the extent of proteolytic activity is determined. The untreated control samples should remain firm and rather tough. The treated samples should demonstrate moderate to extensive proteolysis as indicated by the ease with which the muscle fibers are parted (a loosening and/or softening of the intermuscular connective tissue).

The water bath equipment need not be elaborate. However, it must be capable of maintaining a relatively constant temperature. A maximum-minimum indicator thermometer in the water bath would be helpful in determining the water temperature variation. Papain is active in a temperature range between 140°F. (60°C.) and 185 F. (85°C.); bromelin between a temperature of 86°F. (30°C.) and 140°F. (60°C.). During the conduct of such a test for inspectional evaluation, the equipment should be secured in a manner that would prevent interference with the tested samples. The water bath may be equipped for sealing as one acceptable method.

This technique is intended to disclose treatment techniques that do not result in proper proteolysis of the product. If the sample indicates improper enzymatic activity, the establishment should be informed so that corrective action can be taken. If the results consistently show improper enzymatic activity, the matter should be referred to the Labels, Standards and Packaging Branch of the Technical Services Division.

Inspectors may still submit occasional samples of treated and untreated meat, and enzyme solutions to the Microbiology Laboratory at Beltsville, Maryland.

318.25 Most establishments preparing product containing beans have facilities for cleaning, picking, or otherwise eliminating unsuitable beans from a lot prior to inclusion in a meat food product. Therefore, when lots



## Section 318.25

of beans are received at an establishment having such facilities, the beans should receive a preliminary inspection and may be brought into the establishment unless found to be affected with a condition such as heavy mold, sourness or weevil larvae, webbing, or refuse which could not be removed by the cleaning procedures. Beans from an accepted lot should not be used in product until the cleaning process has removed all foreign material (stones, dirt, weed seeds, and cereal grains) and beans damaged by insects. Beans less severely damaged by insects (in which the seed coat is slightly affected) and those slightly damaged by frost, weather or disease may be included in product. Broken beans and beans with the seed coat partially or wholly removed may also be included. Establishments not having bean-cleaning facilities should receive only beans entirely free of defects that make them unsuitable for inclusion in products. All beans should be thoroughly washed before use.

318.26 Certain seasoning preparations contain various amounts of dried corn syrup, dextrose, and the like. In the enforcement of the requirement that not more than 2 percent of dried corn syrup or corn syrup solids be used in meat food products such as sausage, hamburger, meat loaf, luncheon meat, chopped ham, and pressed ham, inspectors should take into consideration the amount of such sugar added to product by the use of seasoning preparations. Inspectors should make use of the laboratory for determining the amount of sugar other than sucrose or dextrose in the seasoning preparation when this information is not shown on the label. The amount of corn syrup solids in pickle is limited to 50 pounds per 100 gallons based on the dry weight. Since corn syrup contains about 20 percent water, 60 pounds of corn syrup may be used. These amounts should be adjusted when pumps other than 10 percent are made.

## 318.27

A. Thermocouples connected to recording equipment may be used for taking temperature of products that are heated to destroy possible trichinae provided the inspector has assured himself by checking the thermocouples with an official thermometer that the temperatures recorded are accurate. Placing thermocouples in product must be under the supervision of an inspector and an adequate number of thermocouples must be used to determine that all product in the smokehouse reaches the necessary temperature. In permitting use of this equipment, the inspector must assure himself that there is no possible way of recording a temperature that was not obtained in the product being treated for trichinae.

Section 318.10 (c)(1) of the Meat Inspection Regulations requires that pork muscle tissue be heated to a temperature not lower than 137°F. The inspector must therefore know that all such product is adequately heated. When it is determined that a cold spot exists in a heating chamber, the establishment should take such action as may be necessary to eliminate it. Defects in the number or location of heating coils or air ducts in a smokehouse or lack of proper insulation of the heating compartment or unit are the usual causes for cold spots. Some difficulty may also result from uneven loading or distribution of the product in the heating compartment.

When taking the temperature of product, care must be exercised to obtain the lowest temperature in the product. Special attention should be given to the largest pieces of product or the innermost links of bunched sausage. In small varieties of sausage placed in direct contact with wooden smokesticks when the temperature of sausage is only slightly above 137°F., the temperature should also be taken of that part in direct contact with the wooden smokestick.

B. In some establishments equipment such as grinders, choppers, mixers, etc., are used interchangeably in the handling of pork which possibly contains live trichinae and products that are free of live trichinae. Necessary precautions must be taken to assure that those products that are free of live trichinae and which will be distributed from the establishment without further treatment are not contaminated with live trichinae.

318.28 Preparation—Curing, Smoking. Only clear solutions free from insoluble suspended material or other contamination should be injected into meat for the purpose of curing.

318.29

A. Cover pickle that is clear, free of sediment, and does not show evidence of decomposition may be reused. Pickle which escapes during the pumping of blood vessels or during the mechanical injection of curing solutions may be reused under proper conditions. These conditions include sanitary collecting equipment and efficient filtration (faint hemoglobin color permitted) before mixing with new pickle. All pickle lines should be made of stainless steel or approved plastic and those carrying salvaged pickle must be demountable for cleaning at regular intervals.

B. Monosodium glutamate or hydrolyzed plant protein may be added to the pumping pickle, cover pickle, or dry-cure mixture for cured meats. When used in such cured meats as hams, bacon, pork shoulder picnics, cured beef, and tongues, no change is required in the labeling.

C. When samples of cured meats containing monosodium glutamate or hydrolyzed plant protein are sent to the laboratory for analysis, the inspector should furnish information on Form MI-422 concerning the amount of monosodium glutamate or hydrolyzed plant protein used for each 100 pounds of finished product.

D. To standardize our requirements and to preclude the possibility of adulteration of cured pork and beef products, it has been decided to limit the amount of corn syrup solids or corn syrup in pickle to 50 pounds per 100 gallons based on the dry weight. Since corn syrup contains approximately 20 percent water, 60 pounds of corn syrup is considered to be equivalent to 50 pounds of the solids.

318.30 Cured hams intended for canning may be shipped from one establishment to another if shipments are properly identified to the receiving Officer in Charge. To do this, hams should be accompanied by a properly modified Form MI-408-1 which indicates that they are eligible for canning in accordance with applicable regulations.



## Section 318.31

318.31 Cured boneless pork loins and sizable pieces thereof which have been treated for the destruction of possible live trichinae may be shipped provided they bear the marks of inspection. It is not necessary that they then be forwarded in sealed containers or sealed vehicles.

318.32 Official establishments should provide adequate facilities for the control of boneless pork loins during the curing process or adopt operating practices that will eliminate any possibility of shipping untreated cured boneless pork loins.

318.33 A cured, boned, and rolled whole ham, unsmoked, either tied or in a casing, is commonly termed "Scotch Style Ham" in certain localities. As Scotch Style Hams are customarily well cooked in the home or elsewhere before being served, they need not be treated for the destruction of trichinae.

318.34 Section 318.7(r) of the Regulations provides for the addition of phosphates to pumping pickle for cured hams and pork shoulder picnics. This has been extended to include cured pork shoulders, Boston butts, boneless butts, pork loins, and bacon.

318.35 The Armed Forces desire at times to purchase smoked hams smoked at temperatures sufficiently high to impart a partially cooked appearance to the meat. We have acceded to their request not to require such product to be treated to destroy possible live trichinae as contemplated by Section 318.10 of the Meat Inspection Regulations when such ham is to be consigned to Armed Forces. However, the Regulations remain in full effect as they apply to smoked hams that are not consigned to the Armed Forces or tropical climates. Smoked hams prepared for delivery to the Armed Forces must not be diverted into channels of trade until they have been treated by one of the methods prescribed in the Regulations for destruction of trichinae.

318.36 Preparation--Canning. The requirement of Section 318.1(b)(1) of the Regulations does not change the status of such relatively stable products as lard, sliced or slab bacon, sliced dried beef, and the like, which are sometimes distributed in hermetically sealed containers.

318.37 Devices for measuring temperature, including thermocouples and various types of thermometers, are available at official establishments for taking temperatures of product during processing. Inspectors may make use of any such devices in their inspection work, providing they have been checked adequately against an official thermometer to insure accuracy and dependability. When distant reading devices such as thermocouples are used for measuring the temperature of product, the sensitive element must be placed in the coldest part of the product just as is done with thermometers.

318.38 There should be a close synchronization of can-filling lines and heat processing. It is not sound practice to produce at the filling lines beyond normal retort capacity. This may cause a delay in heat processing or a



tendency to hurry some phases of the heating operations. The type and temperature of the canned product as well as the size of the can are some of the factors that must be considered in determining how promptly the product must be heat processed after closing. Cold-packed products should be maintained at a low temperature until heat processing begins.

The following restrictions apply to hermetically sealed, canned product processed and labeled under a "Perishable, Keep Under Refrigeration" statement:

A. No approval has been given for canning uncured products under a "Perishable, Keep Under Refrigeration" warning statement.

B. Cured, unsmoked, boneless pork shoulders, pork shoulder butts, boneless hams or luncheon meat may be canned without steam pressure, cooking, provided the labeling "Perishable, Keep Under Refrigeration" is used. This includes such products in cans having a net weight of 12 ounces or more. The acceptable method of preparation of such product includes curing the product prior to placing it in the can and subjecting the canned product to a cooking process which will assure that an internal temperature of at least 150° F. is obtained. The statement, "Perishable, Keep Under Refrigeration," shall be shown prominently on each principal display panel of labels for such canned product.

C. Cured meat loaves, cured nonspecific loaves and similar cured products, the formulas for which do not include cereal or starch, may be canned under this type of processing provided the formula includes 1 ounce nitrate per 100 pounds product, 1/2 percent dextrose or 1 percent sugar, and the finished product demonstrates a brine concentration\* of not less than 3.5 percent. An internal temperature of 150° F. must be attained during processing in hot water.

D. Cured meat loaves, cured nonspecific loaves and similar cured products containing cereal, starch or similar extenders must meet the same restrictions outlined in paragraph C, except in addition, the brine concentration\* must not be less than 6 percent. (\* The brine concentration is calculated by dividing the amount of salt by the sum of the total water and the salt. This will be determined by the chemical laboratories upon request.)

In addition to temperatures and other factors outlined above, the inspector must examine samples of finished product to satisfy himself it exhibits usual cured characteristics. The addition of nitrate alone immediately prior to canning may not result in a cured product.

Some of the known environmental factors which influence the germination and growth of microorganisms include temperature, salt concentration, pH, presence or absence of starch, sugar, nitrate, nitrite, kind and numbers of microorganisms, etc. The relative importance of each factor in relation to the total other factors is not well established. The numbers and kinds of organisms in cured canned "Perishable" meat items are of great importance; therefore, the inspector should be particularly alert to see that cured product ready for canning is fully sound and has not been handled in a questionable manner.

## Section 318.38(D)

If sweller cans develop in a lot under normal handling conditions, the code should be determined and an unopened can submitted to the Microbiological Laboratory for evaluation together with full information pertaining to the production of the canned product to be evaluated.

318.39 Ample but not excessive head space should be allowed in hermetically sealed containers. Deceptive filling of containers cannot be condoned. Overfilling cans should be avoided.

318.40 Make periodic checks to determine that cold spots do not exist in the heat processing equipment. Exhaust boxes should receive attention as to cleanliness and adequate heating apparatus. There should be free circulation of heat throughout.

318.41 It is not necessary to exercise close supervision over the internal temperature of sausage prior to canning when it is known that such product will be subsequently canned with adequate heating.

318.42 Canned product should be handled, stored, and shipped so as to avoid damage from extremes of heat or cold, rusting, and denting.

318.43 The repacking and reprocessing of contents of defective cans which have been handled as outlined in section 318.11(d) of the Meat Inspection Regulations should include processing by heat fully equivalent to the original processing.

318.44 Establishments may process certain canned products without steam pressure cooking after they have obtained permission from the Director of the Processed Meat Inspection Division. Such products must have been prepared in accordance with methods of preparation shown on approved labeling material for this type of product. This includes use of the ingredients and the development during processing of internal temperatures as specified in the label approval. In addition, labeling should include the perishable warning statement.

318.45 Canned product that is not processed after canning, which has a minimum acidity of pH 4.5, may be prepared in official establishments providing permission of the Director of the Processed Meat Inspection Division has been obtained. Further, such product should be prepared in accordance with methods of preparation shown on approved labeling material for this type of product. pH values should be determined by laboratory analysis.

318.46 At least one container from each basket in a retort should be incubated as a sample of a lot of processed canned product. Incubation of test samples should be accomplished in an acceptable room or compartment held under Government lock. Incubation of a certain sample may be discontinued before the full 10-day period has elapsed if it becomes apparent that the product does not possess the necessary stability to assure its keeping under usual conditions of handling, storage, and transportation. Corrective action regarding the lot should be started at once. Sample incubation is not always



positive proof of the character or stability of the entire lot, and it should be used in addition to, but not in lieu of, constant vigilance and supervision of all processing procedures. There should be no hesitancy to increase the number of cans selected for incubation if there is cause for such action. Careful inspection of product being incubated should be made at least daily.

318.47 Restrictions on the use of water or ice in the preparation of luncheon meat and meat loaf are extended to canned chopped ham, canned chopped pork generally, and canned chopped mixtures of pork and other meats. The quantity of water or ice that may be added to luncheon meat and similar products is based on the percentage of ingredients going into the preparation of the product. Therefore, strict control is exercised at the time of preparation and is not based on the finished product. The amount of water used in the fabrication of the product should be listed in the ingredient statement according to its percentage at the time of manufacture and not as it occurs in the finished product.

#### 318.48

A. The use of efficient jet-vacuum type reequipment has been accepted for cleaning jars and cans before filling in lieu of cleaning with hot water as required by the Regulations. The air cleaning method involves the direction of a powerful stream of filtered air into the open top of the upright container immediately followed by complete evacuation of the container by means of a vacuum-producing device. In properly functioning equipment, the air jet dislodges dust, particles of cardboard and other extraneous material and the vacuum removes these materials just as effectively as the conventional hot water cleaning methods.

Since it is difficult to determine if the cleaner is functioning properly, it is required that such equipment be equipped with safety devices to indicate malfunctioning of either the jet or vacuum-producing parts.

It is also required that the empty containers should be removed from shipping cartons and fed onto the conveyor passing through the cleaner at a location protected from the exhaust currents from the cleaner since it is likely that dust and carton fragments deposited on the unloading table will be blown into the air and deposited in the container after cleaning and before filling. If this is not possible, other means acceptable to the Officer in Charge must be taken to properly control the exhaust currents; for example, venting the exhaust ducts to the outside.

B. Analysis of various contaminants found on hams in Pullman-type cans revealed the contaminants fell in three areas: Small solder splatter pellets; small particles or flakes from the inside can lacquer; and various contaminants and dirt from unclean project or cans.

The tiny solder splatter pellets constitute the minor part of this problem and can manufacturers have been contacted to eliminate or at least greatly reduce this problem in the future. Particles of interior can lacquer might be loosened when the can is placed on the stuffing horn. Close attention



should be given to the condition of the stuffing horn to see there are no sharp rough edges which might cause the lacquer to flake.

The major problem appears to be paper lint or dirt which was not removed from the can in the normal can washing operations. Apparently, can washing facilities designed for shallow cans do not begin to accomplish a thorough washing of the long Pullman-type can. Inspectors are alerted to give this full attention. If necessary, the can washing facilities should be redesigned to insure a large amount of flushing water to all parts of the can. Mechanical brushing may even be necessary to accomplish the desired results.

C. Process water for canned meats may contain not in excess of 600 ppm of sodium nitrite to inhibit can corrosion. The following additions will give a concentration of 600 ppm.

1. 0.56 oz. of sodium nitrite in 1 cu. ft. of water.
2. 6 oz. of sodium nitrite in 78.1 gallons of water.
3. 7.8 oz. of sodium nitrite in 100 gallons of water.

The sodium nitrite intended for this purpose must be decharacterized by the addition of .05 percent of powdered charcoal. Bulk decharacterized sodium nitrite in the cook room shall be held in a locked metal bin or container conspicuously labeled "Decharacterized Sodium Nitrite To Be Used By Authorized Personnel Only."

318.49 Preparation--Sausage. Finished casings prepared at unofficial establishments may be received into official establishments and used as containers of meat food products provided they present no objectionable condition. Unsound casings must be rejected. Animal casings of foreign origin should not be rejected solely because of their dark color. Casings are inspected when they are presented for use as containers. Sewed animal casings should be carefully examined before use, particularly at the inner seams. Excessive fat should be removed from animal casings before use. Hog bungs should be free of hair and scurf at the crown end.

318.50 Animal casings for use as containers must be thoroughly flushed throughout their entire length before stuffing. Whether this can be done singly or collectively can be determined at the establishment by the inspector. Animal casings that have been flushed prior to receipt at the establishment and are packed in a salt solution or slat and glycerin solution may be used as containers after thorough rinsing and without additional flushing if found to be acceptable by the inspector. Materials such as antibiotics, antioxidants, preservatives, nitrite and nitrate are not permitted to be in preflushed casings used at official establishments. A laboratory analysis for these materials should be requested occasionally.

318.51 If the lips from cattle, calves, sheep, and goats are used in the preparation of meat food products, they should be chopped to a fineness that completely destroys the conical shape. Where conventional type choppers are

used experience has demonstrated that the shape of conical papillae cannot be destroyed with certainty unless the lips have first been cooked and the mucous membrane has been removed.

High-speed emulsifying grinders appear to destroy the identity of the control papillae without prior cooking. Where this has been accomplished to the satisfaction of the inspector, the requirements of scalding and removal of the mucous membrane from lips may be omitted.

318.52 The following are not considered normal ingredients of sausage: Eggs, cheese, pickles, macaroni, vegetables. Blood, kidneys, and detached skin are not to be used in the preparation of such types of sausage as bologna, frankfurter, vienna, and braunschweiger.

318.53 The application of approved clear mineral oil or edible vegetable oil to the outer surface of dry or semidry sausage casings as an inhibitor of mold formation has been accepted. Such application must be made after the prescribed treatment for the destruction of possible live trichinae has been completed on applicable products.

318.54 Product prepared with meat byproducts to the exclusion of meat cannot be regarded as sausage.

318.55 The proportion of a condimental substance that may be added to sausage to augment its palatability is dependent on many variable factors. Substances having a strong pungency, aroma, or appetizing quality should be in lesser proportion than substances having those qualities in lower value. On the other hand, condiments, especially those highly colored, should not be added beyond their usefulness as such. For instance, paprika and oil extracts or emulsion of paprika have a low pungency, so a product to which these are added may be considerably altered in color before the condimental effect is apparent. In such a case, coloring properties must be taken into consideration along with seasoning value to determine the proportion that may be used in any given product without producing a deceptive condition with respect to the quality, kind, or amount of meat used in the product. A larger amount of the condiment may be used, however, if it is considered a customary ingredient of a specific product.

318.56 Equipment used in the preparation of sausage containing cereal or other permitted materials of similar kind should be made acceptably clean before it is used to prepare product not containing such additives.

318.57 Cereal is not a permitted ingredient of thuringer or corned beef hash.

318.58 Meat byproducts, cereal, and nonfat dry milk are not permitted in mettwurst.



318.59

A. It is important to differentiate between the basis on which water may be added to sausage which is not cooked and that which is cooked. Sausage which is not cooked may contain up to 3 percent of added water, based on the total ingredients used in the preparation. The added water is not calculated on analysis of the finished product but on the percentage of materials going into its manufacture. On the other hand, cooked sausage may contain up to 10 percent of added water, as determined by analysis of the finished product.

B. Frankfurters and vienna sausage to be packed in water, or brine, or meat broth, or meat stock, or barbecue sauce must comply with moisture requirements before canning. When water or brine is to be the packing media, the quantity of sausage equal to the net weight specified on the label shall be placed in the can. When meat broth, or meat stock, or barbecue sauce is to be the packing medium, the sausage component placed in the can shall comprise 80 percent of the total net content calculated on the basis of the total net content statement on the label, applied to, or to be applied to the can.

318.60 The use of monosodium glutamate or hydrolyzed plant protein does not in any way alter the amount of water that may be used in the preparation of luncheon meat, meat loaf, and fresh sausage, nor in the amount of water that may be present in cooked and smoked sausage. When samples of such meat food products are sent to the laboratory for analysis, information should be furnished by the inspector on Form MI-422 concerning the amount of monosodium glutamate or hydrolyzed plant protein used for each 100 pounds of finished product. For each ounce of monosodium glutamate or hydrolyzed plant protein used per 100 pounds of finished product, 1/16 of 1 percent will be deducted from the total protein before computing the amount of added water in the product.

318.61 Unskinned pork jowls which are free of hair roots may be used to the extent of 50 percent of the meat formula in the preparation of vienna sausage, frankfurter sausage and bologna sausage. The unskinned jowls shall be ground to the fineness necessary to prevent a change in the character of the finished sausage.

318.62

A. As outlined in Part 318 of the Regulations, sausage shall be prepared with meat and meat byproducts. Since smoked meats are considered meat food products, they are not eligible for use in sausage except that byproducts of the industry, such as bacon ends and pieces and trimmings from other cured and smoked meats may be included in such products as cured sausage, luncheon meat, loaves, chopped pork and the like to the extent of 10 percent of the meat and meat byproduct portion of the formula. Any phosphate introduced by this means will be present in such negligible amounts that no useful purpose would be served by a label declaration. In such products for which our standards of composition permit only 3 percent water to be used in their preparation, it is necessary that the moisture included with the trimmings be considered in determining compliance.



B. Rework of fresh pork sausage and similar type product enclosed in edible collagen casings may be used in the production of emulsion-type sausage, such as frankfurters, without removal of the collagen casing providing the product is sound, wholesome, and otherwise acceptable. Since collagen is a normal constituent of meat, it is only necessary that its character be altered to blend and dissolve in the emulsion. When the type of processing is such that the ingredients are finely chopped or emulsified, as in the production of frankfurters, it has been demonstrated that this is accomplished.

318.63 Mustard, because of its low potency and high protein content, shall be limited in sausage and meat loaves to not more than one percent based on the weight of the finished product.

The use of spices and seasonings or mixtures thereof in certain meat food products should be restricted so that no more than 0.35 percent protein is added. The limitation applies whenever the protein content serves as a basis for some form of control such as calculating added water, added substances, trimmable fat, water-protein ratios and phosphorus blanks.

The protein content of permissible spices and seasonings is such that if the amount used in the product is less than 1 per cent, no more than 0.35 percent protein will be added. If the amount used is greater than 1 percent, is unknown or if prohibited high protein additives are suspected, a sample should be submitted to the Meat Inspection laboratory for protein determination. The laboratory will make the analysis and report the maximum amount of the preparation which may be used without exceeding the 0.35 percent protein limitation.

It is recommended, where practical, that samples of spices or seasonings and mixes be taken just before addition to the product.

318.64 When water is used as a solvent for the nitrate ingredient and so added to gain a more even distribution of the curing agent, or when wine is added principally as a flavoring to certain kinds of sausage processed under limitations prescribed in subparagraph 318.10(c)(3)(i) of the Regulations, it is permissible to add not more than approximately 1/4 of 1 percent of water or 1 percent of wine to sausage of the type that is treated for destruction of possible live trichinae by any one of the methods prescribed in subparagraph 318.10(c)(3)(i) of the Meat Inspection Regulations. When used, such ingredients should be shown in the statement of ingredients in the order of their percentage content.

318.65 Acidification with vinegar, lactic acid, or citric acid of approved dye solutions for application to casings is permitted.

318.66 Artificial casings impregnated with soluble approved dyes may be used in official establishments for the small varieties of sausages under the provisions of Section 318.7(m) of the Meat Inspection Regulations. The certification required for coal tar dyes under Section 318.7(B) of the Regulations should be furnished with each lot of such dye-impregnated casings.

"Blow-out" sausage, the sausage resulting from broken casings, and that which is stripped from the ends of the casings in order to effect the tie, may be reworked into subsequent lots of the same kind of sausage provided there is no perceptible coloring of the finished sausage as a result of the inclusion of this material.

318.67 The inspector should examine the products for color penetration before the products leave the establishment. Corrective action if indicated should be taken before the product is shipped. Laboratories should not be asked to examine product for color penetration.

318.68 Preparation—Permitted and Prohibited Ingredients. Ingredients such as dried or candied fruits, dehydrated vegetables, and fruit juices containing small additions of sodium benzoate or benzoic acid, sodium sulfite or sulfur dioxide, or combinations of these for the purpose of preserving the ingredient may be used in the preparation of those meat food products in which such ingredient is customary. For example: Dried or candied fruits, including maraschino cherries, may be used for decorating cooked smoked pork cuts; dehydrated vegetables for preparing soups and hashes; and fruit juices for flavoring certain stews and soups. These preservatives need not be declared on labeling material for meat or meat food product.

318.69 Approval of soy flour, soy protein concentrate, and isolated soy protein as an ingredient of sausage is based upon the binding properties of the substances. These materials consisting of the soy product in finely divided form without additives have also been permitted as ingredients of other meat food products such as chili (as a thickening agent), stew, loaves (other than meat loaves), soups, etc.

Soy product manufacturers are now offering products of the isolated soy protein, soy protein concentrate, and soy protein categories that have been modified by adding such substances as beef extract, spices, flavors, and colors, alone or in combination, to the soy product. The modified soy product is sometimes formed so as to have the appearance of meat which has been ground, flaked, chopped, or diced. Differentiation by sight of the modified soy products from ground or flaked meat is difficult when they are present in processed meat food products.

Soy products that have the appearance of diced, flaked, or ground meat, even though labeled as "soy flour," "isolated soy protein," "soy protein concentrate," or "soy protein" should not be used in the formulation of a meat food product unless specifically approved by the Labels, Standards and Packaging Branch of the Technical Services Division. Inspectors must exercise constant vigilance to assure that such materials are not improperly used in the formulation of meat food products produced under their supervision.

In all cases, the soy products must be identified by their common or usual name in the statement of ingredients and/or product name (as required by regulations or label approval). Soy bean derivatives for which the category or protein content is questionable should be submitted for laboratory



determination. Soy protein concentrate, soy flour and isolated soy protein are practically indistinguishable by visual examination. They may also closely resemble sodium caseinate, nonfat dry milk and certain cereals. Therefore, if the establishment stocks more than one type of soy product, additional controls are required. These include developing with the establishment a procedure for confining soy products for positive identification and maintaining daily records showing amounts of soy bean derivatives used and the type of product prepared.

### 318.70      Preparation—Sampling, Samples.

A.      Meat Inspection laboratories, maintained for analyzing samples and performing other special examinations of products, ingredients, and materials provide the inspector with information he needs to be sure that all products under his supervision are prepared according to the Regulations.

B.      The inspector must be continually alert to detect substances, such as those contaminated by rodents, insects, molds, and dirt, that are unsuitable for inclusion in food. The detection of such contamination often does not require a laboratory examination. Materials such as seasonings, spices, and cereals have been found infested with insects in various stages of their life cycle when received at official establishments. In other instances, infestation has been found after the material has been in storage in the establishment and could occur when fresh supplies are placed in bins or containers that are infested. At some stages (adult, larval, and pupal) the insects are very small and could be easily overlooked. While most infestations can be detected by giving these materials a very careful examination before use, inspectors should frequently send samples to the laboratory where a more thorough examination can be made to determine acceptability.

Since some foreign matter cannot be detected by visual inspection, samples of flour, spice flavorings, curing materials, nonfat dry milk, tomato puree and the like should be sent to the laboratory for examination.

C.      Part 317 of the Meat Inspection Regulations gives the minimum requirements for a number of prepared products, so that the inspector can control the preparation of every batch of product. The Regulations also specify the fat content of hamburger and fresh sausage and the gain permitted in hams for canning. The laboratory may be used for checks on such products, but the primary control is vested in the inspector in the establishment.

D.      When not more than the permitted amounts of curing materials are added to product, there should be few violations for excess nitrite. Sufficient checks of finished product should be made, however, to know whether the conversion of nitrate to nitrite has been greater than normally expected.



E. The inspector should not be concerned with the ability of a particular laboratory to handle necessary samples. Any adjustments in this respect will be made by the District office.

F. Samples may be collected any day of the week. Obviously, the collection of samples should not follow a definite schedule. Care should be taken to have samples of perishable products arrive at the laboratory in good condition.

G. Samples taken for laboratory analysis should be truly representative of the entire lot. The sample should be properly identified from the time it is taken until it reaches the laboratory. Information on Form MI-422, which accompanies the sample, must be fully explanatory and include the name of the product as it will be labeled, the list of ingredients in the order of their percentages at the start of preparation, and the establishment from which the product originated. In most cases the sample should be taken from finished product, although investigational samples may be collected at any point in the operation. In the case of proprietary mixtures, a list of the ingredients as they appear on the shipping containers, the name and address of the manufacturer, and the purpose for which the material is intended should be noted on the laboratory form. Dry mixtures should be submitted in the smaller size plastic film bag (approximately 3 by 6 inches flat) and the bag should be almost completely filled. Liquid materials should be submitted in the conventional 4-ounce sample bottle. If a shipment consists of more than one bag, barrel, or other container, a proportionate number of samples should be taken at random throughout the lot. Any article received in an establishment and not identified by name and ingredient statement should be withheld from use until satisfactory identification has been made.

H. When sampling cereals, spices, and similar materials, the inspector upon opening the package should remove and examine a sufficient portion of the contents to ascertain whether the article is uniform throughout and to make sure that the sample represents the lot. Unfit materials should be rejected. Laboratory analysis of articles known to be unacceptable usually serves no useful purpose.

I. Plastic bags furnished by the Meat Inspection Laboratories should be used in lieu of metal cans as containers of meat and meat food product samples.

Approximately one pound of product should be placed in the plastic bag. Sausage and meat food products of the larger types need not be cut in small pieces. No paper or other absorbent material should be placed in the plastic bag with the sample. The top of the bag should be closed by twisting it, applying several loops of a rubber band and folding the twisted end over and applying one or two more loops of the rubber band. As much air as possible should be excluded from the package; however, the closure should be applied so as to leave some space in the bag around the sample. This will permit some expansion in case decomposition and gas formation occur during shipment. The closed plastic bag containing the sample should be placed directly in the usual mailing carton. Three or four samples may be placed in the carton.

J. All procedures in sampling should be so carried out as to provide the laboratory with as nearly representative a sample as is possible under practical operating conditions. Since no practical method of sampling can be considered entirely free from potential error, the inspector must evaluate the report he receives from the laboratory with full recognition of this possibility of error. There is bound to be a range in moisture content through a production of a batch of cooked sausage and instances where nonfat dry milk or cereal has not been uniformly distributed through the product. It is not probable that any one sampling by an inspector of a batch of product will truly represent the entire production of that particular kind of sausage. The inspector therefore must make allowances for such probability. Naturally, a laboratory report indicating that a sample of cooked sausage contains an amount of moisture, cereal, or nonfat dry milk considerably in excess of the Regulations limitation should be interpreted as a clear indication that the plant's production methods are faulty and immediate correction should be required. By contrast with this, when sample reports show the presence of excessive added moisture, cereal, or nonfat dry milk within narrow limits, the inspector may consider it necessary to obtain additional sample analyses of the sausage before he decides whether or not the methods used by the establishment will produce cooked sausage that conforms with the Regulations.

In addition to the above-mentioned variations, normal variations in laboratory analytical results is also a factor to be considered. The variations have been characterized in a collaborative study by Meat Inspection and industry laboratories. On the basis of this study, moisture in a single sample might be expected (95 percent probability) to vary by plus or minus 2 percent.

#### EXAMPLES:

Added Moisture by Analysis (PERCENT)	Range of Added Moisture (95 Percent Probability) (PERCENT)
9	7 to 11
10	8 to 12
11	9 to 13
12	10 to 14

#### Interpretation:

1. Analytical Result over 12 percent. The inspector should require immediate corrective action to reduce the moisture content of the sausage.

2. Analytical Result 11 to 12 percent. The inspector should carefully review all details of the moisture control routines. Changes in formulation or manufacture need not be required unless the review indicates that the added moisture has been increased due to changes in production. Additional samples of product from subsequent lots should be taken and if the results of two consecutive samples fall in this range, the inspector should take action as outlined in "1."



3. Analytical Results 10 to 11 percent. The inspector should continue the usual inspection routine but submit samples from subsequent lots. If the results of four consecutive samples fall in this range, the inspector should take action as outlined in "1."

K. The handling of decomposed samples by the Meat Inspection Laboratories is not only objectionable to the chemists and technicians but also adversely affects the accuracy of the analytical procedures for nitrite, non-fat dry milk, and sugars such as those contained in corn syrup solids. Unless perishable samples can be mailed immediately with assurance that they will not remain in the mail channels over a weekend or holiday before delivery to the laboratory or be otherwise unduly detained, the samples should be frozen or otherwise protected prior to mailing. Adequate control should be exercised during the time that the samples are being frozen to assure that there is no opportunity for manipulation of the sample collected by the inspector.

1. Certain stations located a considerable distance from the chemical control laboratory serving them may find it necessary to forward samples to be examined for nitrite under refrigeration, such as might be obtained by packing the sample with dry ice. Chemists in Charge of laboratories should assist inspectors in developing satisfactory mailing procedures by reporting those occasions when the sample arrives in a decomposed condition. In such cases it would probably be desirable to indicate the date and hour that the sample arrived at the laboratory.

2. When necessary, fresh products such as pork sausage and hamburger should be protected from decomposition by the addition of approximately 10 drops of formalin to the product at the time the sample is collected. The product and the formalin should be thoroughly mixed by kneading the package after it has been closed. When so treated the sample form should carry a statement such as "10 drops formalin added."

3. If a perishable sample is to be transported in excess of 200 miles, it should be shipped via airmail to insure efficient handling of sample. DO NOT SHIP BY AIR EXPRESS.

a. Clearly address the package by either printing or typing the name, address, and zip code of the recipient on a U. S. Government Frank (Form AD-11) and firmly secure the frank to the package.

b. Securely fasten one POD Label 19 to each side of the package.

c. Securely attach (where it will be clearly visible at all times) a POD Label 38 to the package.

d. Where feasible, deposit the package at the local post office to expedite handling.



e. POD Label 19 and Label 38 can be obtained from your local post office.

f. Packages being mailed to the Microbiology Laboratory, Beltsville, Maryland, should be addressed as follows:

Microbiology Laboratory  
C&MS, USDA  
Box 348  
Beltsville, Maryland 20705

### 318.71

A. Form MI-422 is designed for reporting one sample only. The establishment number and sample number should be shown on the form in the designated space. The previously used single series for all products will be replaced by a separate series of numbers for each product. The serial numbers will be used in conjunction with the establishment number as practiced in the past. Sample numbers should begin anew the first of each fiscal year (July 1). Log books for samples will be replaced by:

1. Charts used only for cured and smoked, cooked or canned pork product will be continued.

2. A sample record as illustrated in example number 1 will be used for all other meat food products with a separate number series for each product. See Example #1.

3. A sample record as illustrated in example number 2 will be used for all nonmeat items using one series of numbers. See Example #2.

The second column in the sample record (Example #1) is to be used for the product code number as listed on Form MI-422-A. The month columns will be used for listing the sample series number at the time a sample is submitted. When the sample results are returned, the series number in the record will be crossed with a line (Ø) if in compliance or encircled if in violation (Ⓢ). Sample results in the "B" or "C" categories are to be recorded as ⓂB or ⓂC unless action is required for category "A" and recorded as a violation. When entering product in the sample record for meat food products, it will be noted that in some instances two or more products may have the same product code number. This will result in two or more MI Forms 422 having identical number identification. In this case, the "Franks, All Beef" or "Franks, All Meat" will identify the product under which the sample is recorded.

Example #1

## MEAT AND MEAT FOOD PRODUCTS

Product	Code	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
All Meat Bologna	340 11					1 6 2 7 3 B 4 C ⑤	8 9 C 10 11	12 13					
Bologna - Cereal Added	340 13					1 2	3	4					
Franks - All Beef	330 11					1 2							
Franks - All Meat	330 11					1 2	3 4						
Franks - NFDM Added	330 14					1	2 3	4 5					
Franks - Cereal Added	330 13					1	2	3					
Pork Sausage	310 10					1 ② 3	④ 5 ⑥ 7 8	9 10					
Hamburger	460 10					1	2						
Chili - No Beans						1	2						
Chili with Beans						1	2						
Luncheon Loaf						1							
Liver Sausage - NFDM Added	340 34					1							
Braunschweiger	340 31						1						
Tastee Loaf							1						
Xout Loaf								1					
Sure Fire Loaf								1					
BBQ Loaf						1							
Chopped Ham							1						

## Example #2

## NONMEAT ITEMS

Product	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Nonfat Dry Milk Dairy Farm Gilroy Creamery					1 2	7	⑪ 13 12 10					
Gelatin Grays Lake Co.					3							
Soap - Hand Oakite No. 188					5							
Salt						8						
Seasoning Frank Griffith Kearnsmith Kadison					4	6 9		14				

B. When using Form MI-422 (snap-out type), inspectors should place it on a hard even surface and make the entries in such a manner that they will be legible on all copies. Do not remove carbons from the form before sending it to the laboratory. Items 6 and 7 on the form will be completed by the laboratory so should not be used by the inspector. Distribution instructions printed at the bottom of the form should be followed.

C. All sample forms for products should include the inspector's request for information concerning the product represented by the sample. He may indicate the information desired by placing a check mark, or check marks, in the column to the left opposite the appropriate items listed; for example, "added water," "N.F.D. milk," "cereal." If an item requested is not listed under No. 8, the check mark should be placed to the left of "Other" and the specific request written in the space provided. Unless a sample is accompanied by a form asking for specific information, the sample will be discarded by the laboratory. The laboratory will return the form to the inspector with a notation to that effect.



## Section 318.71(D)

D. When a sample does not comply with the Regulations, the inspector should state the corrective action taken on the original and first copies in accordance with the instructions on the reverse side of the form. This report should be forwarded to the Officer in Charge for his comments and signature and then sent to the District Director. Be sure that the form sent to the District Director is legible and shows the action taken for correction of the reported violation.

## 318.72

A. When a sample is sent to the Meat Inspection Laboratory for special purpose, a notation must be made on the laboratory form to that effect, or the form should bear reference to a letter or correspondence. If no notation appears on the form to indicate special handling, the sample may be discarded or given the usual analysis for the class of product, especially if it arrives ahead of any correspondence on the subject.

B. Samples submitted at the request of the Labels, Standards and Packaging Branch or involved with questions handled by that office (unless there are instructions to the contrary) should be directed to the Labels, Standards and Packaging Branch, Technical Services Division, GSA Building, 7th and D Streets, S.W., Washington, D. C. Perishable products should be appropriately handled.

318.73 Fiber cartons for forwarding samples are stocked at the following stations: Atlanta, Georgia; Chicago, Illinois; Kansas City, Kansas; New York, New York; St. Louis, Missouri; San Francisco, California; and Washington, D. C. The fiber cartons should be used exclusively for sending samples to the laboratory.

Where fewer than three samples are placed in the carton, the additional space should be filled with paper or other light waste material. Two addressed franks, one for forwarding samples to the proper laboratory from which they were forwarded, should be prepared by the inspector at the establishment. The franks should be placed on the carton in such a way that only the outgoing frank will be visible when the carton is tied and ready for mailing. In this way, an adequate supply of sample containers and cartons should be available at the establishment whenever needed.

318.74 The following instructions apply to the control of canned pork products, cooked cured products and smoked pork products:

A. The inspector has the responsibility, as with all other products, to ascertain that the smoked, cooked and canned hams and other cured pork items distributed from the establishment are in compliance with the Regulations. In order to fulfill this responsibility, the inspector must have sufficient knowledge of the establishment's production practices and control procedures to evaluate their effects on the finished product.

B. The establishment is expected to exercise control over all restricted ingredients and the curing, smoking and chilling practices to assure continued production of products in compliance with the Regulations. The establishment is expected to adopt uniform procedures for pumping, curing, smoking and chilling each kind of product to prevent unusual product variation.

The inspector is required to know, by frequent direct observation of the measuring and weighing of restricted ingredients, the exact amount of these ingredients used in curing solutions. Information gained from establishment personnel alone is not sufficient. Samples of curing solutions collected at irregular intervals should be submitted for laboratory analysis. Any significant deviation in nitrite, phosphate, or ascorbate content between pickle made under direct supervision and that formulated without supervision would indicate a need for closer supervision by the establishment management and more restrictive control by the inspector.

In order to assure that restricted ingredients are not being used in excess of the quantity permitted by the Regulations and that the pumping procedure is uniform, the inspector is required to conduct frequent daily calculations to determine the percentage of curing solution injected into each kind of product. In the event pumping procedures are inconsistent, more frequent product sampling will be required. Calculate the percentage pump after the free pickle has had an opportunity to drain from the product.

C. The inspector is required to have knowledge of the usual shrinkage of each kind of product during the smoking process. This information should be related to time, temperature and relative humidity. The usual percentage of shrinkage during various chilling periods for each kind of product must also be established by the inspector. In developing the information, it is essential that the inspectors use their knowledge of packinghouse procedures and variation in facilities.

A uniform chart will be used for recording usual establishment procedures. A completed chart for each kind of product produced at the establishment must be on file in the office of the inspector. Procedures reflected by the chart will indicate the pickle formulation, pumping percentage, usual smokehouse shrink and usual cooler shrink. A duplicate copy of the chart must be forwarded regularly to the Officer in Charge for his information. Results of laboratory analysis of samples of the kind of product produced by the procedure reflected by the chart must be recorded on the inspector's copy in the space provided at the bottom. The chart will provide daily opportunity for inspectors to evaluate the ability of a specific procedure to produce products in compliance with analytical requirements and to confer with establishment personnel on any procedural change required for added moisture adjustment. Any action taken by the inspector to reduce added substances content or to retain product pending laboratory analysis should be noted on the chart. In the event the establishment alters procedures by changing pickle formulation and/or pumping percentage and/or smokehouse or cooler shrinkage, a new chart must be made to reflect the change. Supervisory personnel should conduct weekly reviews of establishment procedures for curing, pumping, smoking and



chilling to determine the accuracy of current charts for each product. Samples should be submitted more frequently than once a week, if necessary, because of lack of effective establishment control procedures over pickle formulation, curing, pumping, smoking and chilling practices.

D. Selection of Samples. The importance of collecting a random sample cannot be overemphasized. It must be done intelligently, always bearing in mind the time of sampling, location where selected, weight average of the product, and any other factor that could be anticipated. The inspector must maintain security of the sample from the time it is first selected until it is in custody of the Post Office Department.

To assure that samples submitted for analysis are representative of production, samples of the same class of smoked, cured or canned pork products will be collected several times during the day and/or night. These samples will be placed in a secure retaining cage and once during the day, the inspector will select the sample to be submitted for analysis from the samples previously collected. Those products not selected for the sample will be returned to the establishment and on days when no sample is selected, all product will be returned.

E. Sampling. Except as provided below, a minimum of one sample of each class of product will be submitted to the laboratory biweekly. For certain products, such as country-style smoked hams, Canadian-style bacon, water added smoked pork, water cooked hams, pork shoulder butts, and bacon where there is a history of the preparation of product well within the limit of the Regulations, less frequent sampling of these products is expected. Inspectors will sample products more frequently and the Officer in Charge may authorize market sampling of product when such information is considered necessary to determine the acceptability of procedures used by the establishment.

Establishments receiving cured products for further processing will need to establish a history indicating acceptability of the processing procedures and inspectors will sample each lot of product until such information is developed. If cured products for further processing are received from several establishments, a history as outlined above must be developed for each curing establishment from which products are received.

Some establishments may wish to obtain a duplicate of the sample submitted by the inspector to the Meat Inspection Laboratory. This is permissible when a truly representative sample is provided. The following facilities and procedures will be used in the preparation of samples in this regard:

A power-driven grinder with C-12 chopper ends, plate with 1/8 inch openings, two pans large enough to permit boning of the product and mixing of the chopped material, and knives suitable for boning and trimming. If C-12 chopper ends are not available, a large chopper may be used provided it is dismantled and that portion of the product remaining in the barrel and screw is removed and included with the sample.



All operations must be conducted as quickly as possible to minimize moisture loss by evaporation. The product should not be placed on absorbent material or unnecessarily exposed to evaporation either before or after chopping. All liquid which escapes during boning, cutting or trimming must be reincorporated during the chopping and mixing operation. Failure to follow these instructions closely will result in the sample not being representative of the product.

Boning, cutting and trimming of the ham or other pork cut should be performed over a pan to prevent loss of liquid which escapes. The bone should be trimmed free of meat insofar as practicable and the trimmings and all fat from the individual piece should be included with the sample. All material except the bone and skin should be passed rapidly through the chopper twice and mixed thoroughly after each chopping. Approximately one pound of the ground, mixed meat should be placed immediately in an impervious plastic bag that must be tightly closed to prevent loss of moisture; samples of one and one-half pounds are desirable.

When a whole bone-in unit is submitted, any protruding bone should be removed and/or several layers of nonabsorbent material should be securely fixed over the area of the bone to prevent puncture of the sample bag.

A production unit is a whole ham or a pork shoulder picnic, etc. A laboratory sample may be the whole unit; a ground portion taken from a production unit and prepared as described; or a center slice one-inch thick taken from a ham, pork shoulder picnic, or similar product. A sample of a cured canned product shall consist of one unopened can. A sample of sliced packaged product should consist of at least three one-pound packages, preferably taken from the same unit.

Products labeled "Sliced Cooked Ham, Gelatin Added" derived from canned ham identified as "Cooked Ham, With Natural Juices, Gelatin Added." In preparing canned hams for slicing after their removal from cans, the free juices and surface gelatin are discarded when the sliced product is sample. A notation should be made on Form MI-422 to indicate that the product was derived from a canned ham and that the surface gelatin and free juices were removed. This will inform the Meat Inspection Laboratory that no adjustment for gelatin is necessary.

The mailing of samples to the laboratories should be accomplished so that the sample does not arrive at the laboratory on Saturday, Sunday, or holidays. Samples obtained toward the end of the week may be held under seal at the establishment pending proper mailing time. Extreme care should be exercised in preparing, packaging and mailing samples to the laboratory. When plastic sample containers are broken, torn or otherwise perforated, the sample is useless to the laboratory for analytical work.

No determination of nitrite will be made by the laboratories on chopped samples unless they are received in the laboratory the same day as collected, or are packed in sufficient quantity of dry ice or similarly protected to prevent changes in nitrite content.

The laboratory will report percentages of added substances or added water without reference to compliance or lack of compliance of the product. Use of the following criteria recognizes differences resulting from analytical variance and practical sampling limitations and assures substantial compliance.

F. The following criteria are to be used in evaluating the analytical returns for added substance in smoked pork products and cooked canned products. For the present time, cooked cured product will be included in the general range of miscellaneous products.

1. Each single sample is expected to be within the upper limits identified in Table I-A for that product.

2. Single sample returns above that provided in No. 1 of this paragraph but within the limits identified in Table I-B indicate a need for immediate change in processing procedure and corrective action sufficient to bring future single samples within the expected range. This corrective action can be accomplished by altering the curing procedures, increasing smoking time or increasing processing temperature to effect necessary results.

3. For single sample results higher than those provided for in No. 2 of this paragraph, all product of the type represented by the sample would be retained. Processing procedures must be altered to effect corrective action. No lot of product represented by this sample would be released until further processed or handled in a manner to bring the product into compliance.

4. In addition to the above action for single sample results, the average of the last five single sample results is expected to be within the limits outlined in Table II-A for that type of product. As long as the average of the last five results does not exceed this requirement and the return on any individual sample does not exceed that outlined in No. 1 of this paragraph, the product may move freely.

5. If the average of the last five samples is more than that permitted in Table II-A, but within that allowed within Table II-B for that type of product and the establishment has a satisfactory history of compliance for that type of product, corrective action as in No. 2 of this paragraph is indicated.

6. If the average of laboratory sample results is above that provided for in Table II-B, corrective action will be taken as outlined in No. 3 of this paragraph. After sufficient samples have been taken to return the running average of the last five samples within the limits provided for in No. 4 of this paragraph for that type of product, then procedures can return to normal.

The rate of production should be fairly constant during the sampling pattern; that is, if production should increase materially, more samples should be taken in proportion to the increased production. The laboratory results of product prepared under one processing procedure must not be averaged with product prepared under a different procedure. In calculating the running

average, the limit on negative results will be that defined in Table I-A for that type of product.

This section provides for differences resulting from analytical variance and practical sampling limitations only and should not be construed as a deviation from the requirements of the Meat Inspection Regulations.

When as a result of all information available including the analysis of samples the inspector determines that the processing procedures are not producing product in compliance with the Regulations, the inspector will retain product for such additional processing as needed and require corrective measures in the processing until he is assured that the class of product as prepared for distribution is in compliance with the Regulations. Any unproven change in processing procedure would be the basis for retention until sufficient returns are available to indicate compliance unless the changes made by the industry in the processing procedures would appear to result in product that would be in compliance.

G. Definitions. There are certain phrases and terms in connection with the control procedures which may need further clarification:

1. "Products of the class" means a specific kind of product; for example, "Regular, Bone-in Smoked," "Regular Bone-in Shankless Smoked Ham," "Fully Cooked Regular Bone-in Smoked Ham," or "Fully Cooked Boneless Ham."

2. "Product on hand represented by the sample" means that the kind of product produced by the same procedures as the sample regardless of weight range or date of production.

3. "Brought into compliance" refers to reducing added substances to within the acceptable range as outlined in Interpretation of Analytical Results.

TABLE I-A RANGE FOR SINGLE SAMPLE RETURNS

Smoked Hams	<u>+5.8</u>
Smoked Picnics	<u>+4.5</u>
Smoked Butts	<u>+4.5</u>
(and Misc. Products)	

TABLE I-B

Smoked Hams	+5.9 to 7.4
Smoked Picnics	4.6 to 5.8
Smoked Butts	4.6 to 5.8
(and Misc. Products)	

TABLE II-A RANGE FOR AVERAGE OF RETURNS

Smoked Hams	<u>+ 2.6</u>
Smoked Picnics	<u>+ 2.0</u>
Smoked Butts	<u>+ 2.0</u>
(and Misc. Products)	

TABLE II-B

Smoked Hams	2.7 to 3.3
Smoked Picnics	2.1 to 2.6
Smoked Butts	2.1 to 2.5
(and Misc. Products)	



TABLE III PROTEIN MULTIPLIER

Smoked Hams	3.79
Smoked Picnics	4.00
Canned Pork Products	3.83
Smoked Butts (and Misc. Products)	4.00

From time to time inspectors should conduct yield tests at the establishment for different smoked and cured pork products to determine if the laboratory sampling controls are effective in the production of proper product. However, the decision on corrective action to be taken against product will continue to be applied on the basis of laboratory returns and the results of a continuing average of results falling within approved range for these products as outlined.

Control of Added Substances in Canned Hams. Laboratory results for added substances for canned hams should fall within the following zones when they originate from a lot of product that has been processed in compliance with the Regulations. The following formula will be used to estimate yield:

$$\text{Estimated Yield} = \text{Moisture} + \text{Salt} - K \text{ Protein} + 100$$

(The protein multiplier K is equal to 3.83.)

An upper control limit of 116.2 added substances has been established for this type of product. Analytical results between 108 and 116.2 have been divided into three zones for control purpose (Zone A, B, C).

#### Inspection Action Related to Laboratory Results.

1. Analytical Result 108 to 110.8 (Zone C). The inspector should continue the usual inspection routine including periodic submission of samples from subsequent lots. If the results of 8 consecutive samples fall in Zone C or beyond, the inspector should take action as outlined in 4.

2. Analytical Result 110.9 to 113.5 (Zone B). The inspector should continue the usual inspection routine including periodic submission of samples from subsequent lots. If the results of 4 out of 5 consecutive samples fall in Zone B or beyond, the inspector should take action as outlined in 4.

3. Analytical Result 113.6 to 116.2 (Zone A). The inspector should carefully review all details of the product control routines. Changes in procedure need not be required unless the review indicates that the added substances have been increased due to changes in production procedures. Additional samples should be taken and if 2 out of 3 consecutive samples fall in Zone A, the inspector should take action as outlined in 4.

4. Analytical Result over 116.2 (Upper Control Limit). The inspector should require immediate action to adjust the process so as to reduce the added substance of subsequent lots. Product on hand represented by the original process is assumed to be out of compliance. Disposition of such product may be by reprocessing or relabeling.

Control of added substances in canned picnics and loins may be accomplished under the same general guidelines as for canned hams. At the discretion of the establishments, in-plant inspectional controls may be used to control added substances in canned picnics or loins in lieu of the laboratory method of control.

We have approved certain commercial chemical laboratories for official chemical analysis of smoked pork products. This approval is based on the commercial laboratory's ability to duplicate Meat Inspection Laboratory results as indicated by a correlation of results from duplicate samples.

When an establishment elects to use an approved commercial laboratory, all routine samples for that type of product should be submitted to that laboratory. Commercial laboratories cannot be used solely for occasional or emergency samples.

318.75 The water-protein ratio in canned luncheon meats and potted meat food products varies depending on the percent of tripe, tongues, or hearts in the formula. Therefore, when samples of luncheon meat and potted meat food products are submitted for laboratory analysis, the inspector must record on Form MI-422 the percentage of tongues and hearts in the formula for luncheon meat and the percentage of tripe in potted meat food products.

#### 318.76

A. Inspectors are sometimes required to make a considerable number of inspections of materials other than meat or meat food products that are used in preparation of products and otherwise in official establishments.

In order to evaluate the requirements for this important phase of the inspection work more accurately, Form MI-407-4 has been designed for use in reporting rejection of materials found to be unacceptable for use.

One form should be used for each material rejected, and one completed form should be sent to the C&MS Meat Inspection Administrative Staff, Chicago, Illinois, along with other MI reports, and one copy retained for Circuit files. When there is no rejection at the station during a calendar month, a report should be completed with the notation, "There were no materials rejected at this station during the month of - - - -."

B. Materials other than products that have been rejected for use may be removed from the establishment or destroyed within the establishment if the management so desires. In most instances, it will be well to notify the Food and Drug Administration and local health authorities of such action.

318.77 Powdered, semisolid, viscous, or fluid soup bases, gravy mixes, dehydrated soup mixes, bouillon cubes, and the like, containing meat extract or animal fats or both as the only meat or meat byproduct ingredient, will not be regarded as meat food products. When such articles are prepared for sale in interstate or foreign commerce or are offered for importation into the United States or its territories, they are subject to the Food, Drug, and Cosmetic Act administered by the Food and Drug Administration of the Department of Health, Education, and Welfare.

318.78 The inspection procedures contained in this Manual provide adequate tools to obtain the production of meat food products in compliance with the Meat Inspection Regulations if properly applied by the assigned inspector. This is demonstrated by the fact that practically all establishments routinely produce product in compliance under these inspection procedures.

However, some inspectors incorrectly consider the existence of a record of having applied the inspection procedures as the end of their responsibility in this area. A record of having applied the approved inspection procedures in an establishment is not by itself adequate evidence of an effective inspection program in that plant. An additional important evaluation of the effectiveness of the inspector's performance can be obtained by examination of the product the establishment is permitted to ship with the marks of Federal meat inspection.

It is quite apparent that the manner in which "in-plant" inspection procedures are applied is extremely important. First is the matter of security as it relates to the sample preparation and submittal procedure. An inspector selecting a sample must not leave it unattended before, during or after sample preparation. The selection of the sample must be done intelligently to reflect the type of product currently being produced by the establishment. Should the inspector fail to vary his sampling pattern intelligently or to properly select a random sample, the establishment could anticipate his inspection procedures and the sample results might be completely inaccurate as far as the total production is concerned. This is an area where an inspector's competence and ingenuity must be exercised to the fullest and he is completely responsible.

In addition to the usual methods of reviewing inspection, supervisors and Officers in Charge should frequently evaluate products produced at establishments by examining a number of units of a particular type of product taken from marketing channels. Under the guidance of the District Director, a program should be developed to check the product to be sampled and the components to be tested for—such as added substances, preservatives, etc.



The results of these market sample tests should closely parallel the results of the inspector's "in-plant" program. If the results of the market samples do not closely resemble the "in-plant" program, it demonstrates inadequate inspection, improperly applied inspection, or other inspection faults needing correction. In these cases, the Officer in Charge should promptly make such arrangements as he feels are necessary to correct the deficiency and at the same time continue to apply close supervision over the product leaving the establishment.

318.79 Products identified on the container, as follows, are being produced under Federal inspection.

- A. "Pork Cracklings, With Water Added."
- B. "Pork Crackling, With Beef Blood and Water Added."
- C. "Residue From the Rendering of Pork Fat, With Water Added."
- D. "Residue From the Rendering of Pork Fat, With Beef Blood and Water Added."
- E. "Beef Cracklings With Water Added."
- F. "Beef Cracklings With Beef Blood and Water Added."
- G. "Residue From the Rendering of Beef Fat, With Water Added."
- H. "Residue From the Rendering of Beef Fat, With Beef Blood and Water Added."

These products are prepared from edible ingredients and are adequately described by the label on the container. They have not been accepted as ingredients of any meat food product. The necessary inspectional control to prevent misuse of these products if they are handled at an establishment must be provided.

318.80 Inspectors must be alert to detect and eliminate an unsound condition, improper weight, and adulteration of packaged meats and meat byproducts such as livers, hearts, tripe, kidneys, cheek meat, etc. This applied not only to products shipped in domestic commerce but particularly to products certified for export.

The following areas of inspection must be given special attention:

- A. Meat byproducts must be properly handled to prevent unsoundness. These types of products are particularly prone to unsoundness if not properly chilled or frozen. If the chilling and freezing operations are performed in the federally inspected establishment, they must be done in a manner that will result in completely sound material. Occasionally offal products are bulk packed before being chilled. Freezing in this case must be followed by further examination to detect any possible unsoundness.

B. Products must be properly drained prior to packing or for use as an ingredient in a manufactured meat food product. It has been demonstrated that improper draining of meat byproducts after washing or soaking in water can carry excess water into the package or into the manufactured meat food product. Inspectors must be alert to control these practices. Improperly drained product, particularly pork hearts, cheek meat, tripe, head meat, etc., can add considerable weight to the packaged product. This results in a deceptive weight of the package and is also important when these items are used as an ingredient of a meat food product having water limitations such as luncheon meat, potted meat food product, etc. The adulterated ingredients become a means of introducing additional water to the end product. Products should be well drained after immersion in water.

C. In the certification of meat byproducts for export, inspectors must be alert to ascertain that only sound, wholesome, product is being certified. Many times packaged product may leave inspected establishments and after varying periods in outside storage is presented for export certification. In these cases, the inspector must be particularly careful to assure himself the product has not been mishandled in the meantime and is still completely sound and wholesome. In frozen product this may be done by defrosting samples or removing frozen cores of product for defrosting and examination. The amount and kind of reinspection required will depend upon the circumstances and knowledge the inspector has concerning the prior handling of the product.

Inspectors will be held strictly responsible for all products certified by them. Furthermore, supervisors and Officers in Charge who are responsible for these inspections at their Circuits must arrange to review the efficiency of inspectors' decisions at regular intervals.

318.81 Pizza pie crust or dough, masa, tortillas, and similar bakery items used in preparing meat food products in official establishments must be prepared either in an official establishment, under the supervision of the Processed Products Standardization and Inspection Branch, Fruit and Vegetable Division, C&MS, and so certified, or received from an approved supplier.

An approved supplier is a manufacturer known to be operating under acceptable sanitary conditions and in a position to certify the formula and ingredients used in each shipment. The official establishment receiving the prepared article from an approved supplier must arrange for unqualified entry of our inspector into the facilities where the article is prepared. At the discretion of the Officer in Charge, our inspector in the area where the nonmeat item is produced will make occasional reviews of the operations to check the formulation and assure sanitary handling of the component intended to be used in the manufacture of an inspected product.

318.82 Anticaking agents. We currently accept salt, cures or seasonings containing up to 2 percent singly or in combination of tricalcium phosphate, tetrasodium pyrophosphate, calcium carbonate, magnesium carbonate, calcium stearate, silica gel, calcium aluminum silicate, calcium silicate, magnesium silicate, sodium alumino-silicate, sodium calcium alumino-silicate, sorbitol, glycerol (glycerin) or propylene glycol as anticaking agents.

The label on the container of such preparation must bear a statement such as "Not more than 2 percent tricalcium phosphate present as an anticaking agent."

We also accept salt containing up to 13 ppm of yellow prussiate of soda (sodium ferrocyanide decahydrate) as an anticaking agent. The label on the container may reflect its presence by a statement such as "Yellow Prussiate of Soda Added."

Our permission does not cover use of these agents as such in meat food products. When salt, seasoning or curing mixtures containing these are used in product, their presence need not be shown on the product label.

318.83 When commercial curing compounds containing nitrites are received, they may be released for use in the official establishment only if the manufacturer has indicated on the container that a sample of the lot from which this compound was derived was chemically analyzed and found to be acceptable and within the nitrite limitations on the label.

This additional control does not change the traditional sampling applied by the inspector to assure acceptability of the curing compound. In order to fully exercise his responsibilities, the inspector must periodically submit to the Meat Inspection Laboratory samples of shipments of curing compounds even though certified as described above.

318.84 Thermometers designed to register high and low temperature ranges are available to Meat Inspection Circuits for checking the accuracy of the working thermometer used by the inspector.

The thermometers are of two types

- A. High—registers temperatures between 0 - 230 degrees F.
- B. Low—registers temperatures between -30 - +120 degrees F.

Each thermometer is identified with a number. The thermometer must be checked with the correction sheet available at the Circuit. To provide an available reference to the user, the corrective factor should be transferred from the sheet to a tag attached to the thermometer. To arrive at an accurate reading, a plus or minus degree, when shown on the correction sheet, must be added or subtracted from the reading on the thermometer.

The proper manner for testing the working thermometer with the standard check thermometer is as follows: High—place both the standard check thermometer and the working thermometer in a mixed water solution at the temperature range you desire to check. In the case of the low thermometer, place the standard check thermometer in the cooler or freezer along with the working thermometer and leave for a period of time necessary to determine recorded temperature on both thermometers.



318.85 The preparation of loaves, other than those identified as meat loaves, generally involves the use of byproducts from processing operations including cured and uncured product.

Accordingly, trimmings derived during the preparation of pork cuts which have been cured with approved phosphates in addition to other curing ingredients may be used without limitation in the preparation of loaves (other than those designated as meat loaves). When used, the kind of phosphate should be shown in the statement of ingredients.

318.86 A problem exists when material has been found to be satisfactory chemically but proves to be unsatisfactory when put into actual use. This has been particularly true with solvents and plasticizers used with packaging material.

The usual procedure is for the manufacturer to submit the material to the Laboratory Branch of the Technical Services Division for approval. If they find the material to be chemically safe and it appears to be satisfactory, the manufacturer is notified by letter. The inspector at the establishment will permit the use of the material on the basis of this letter or he will submit a sample of the material to the local laboratory for approval. In either case, if approval is granted, it is with the understanding that the material proves to be acceptable in actual use. If the material disintegrates, has an appreciable odor, transfers color to the product or results in any other objectionable condition, it is not acceptable even though the original material has been approved by the laboratory. In many cases, this can only be determined by the inspector in the establishment.

Therefore, it is the responsibility of the inspector to make the final decision on the acceptability of material used in establishments under his supervision. If material that has been determined to be acceptable chemically proves to be unsatisfactory when used, the Laboratory Branch, Technical Services Division, should be notified.

318.87 Standard weight sets are available at each large Circuit. The District Director's office will inform Circuits where the sets will be located and how they will be made available.

It is the responsibility of the establishment and weights and measures officials to certify the accuracy of scales.

The inspector will use the test weights when he has reason to question or to check the adequacy of the establishment's scale testing program. This might involve checking old scales that quickly lose their accuracy to find out if the establishment is servicing the scales at frequent enough intervals. The program may include checking scales at intermittent intervals to insure the establishment's testing program is adequate. The check weights used by the establishment might be compared with our standard set. Particular attention should be given to the establishment's program for checking scales used in internal controls for regulatory requirements. This would include scales in spice rooms, formulating rooms, or scales used in determining gain during processing.

318.88 Smoke flavoring and imitation smoke flavoring. Initial lots of any of the preparations already determined to be acceptable or others which may subsequently be accepted should be sampled for laboratory analysis when presented for use in the plant. The preparation should not be used until a favorable report is received. In order to assure these items are as represented, we require that these come into official establishments unmixed with seasoning or curing materials. The plant may mix these with seasonings or cures prior to use after the inspector is sure the smoke flavor is satisfactory. If your office receives from a manufacturer or supplier requests for information as to how they may proceed to have a smoke flavoring cleared, you may refer them to the Laboratory Branch of the Technical Services Division.

It has also been decided to allow use of oil of cade to produce a simulated smoke flavor in certain products. It may be brought into the plant alone or in admixtures with acceptable seasoning materials and is subject to the same requirements as for imitation smoke flavor.

Smoke flavor or imitation smoke flavor should not be confused with some of those naturally smoked items which have been accepted by us in appropriate products in the past. These are smoked yeast, smoked cheese and smoked poultry which may be used as ingredients of certain meat products. There has been no change in respect to the use of these items.

Materials such as smoked salt, smoked soy flour, smoked nonfat dry milk, smoked seasonings, etc., prepared by direct exposure to wood smoke have not been approved. If proposed, these and other preparations which have been subject to smoke will be evaluated under the same criteria as used to determine the safety of the smoke flavor and imitation smoke flavor accepted previously.

318.89 Seafood in official establishments. The evisceration, scaling, cleaning or other similar preparation of seafood shall not be permitted in an official establishment unless the area in which such operations are conducted are completely separate from edible products departments. Such areas must be approved for this purpose and be equipped with suitable and adequate sanitary facilities.

When clean, sound, wholesome seafood is cooked, canned, frozen or otherwise processed in an edible department of an official establishment, the operation must be separate from any meat processing operation. As far as practicable, these operations should be conducted in separate areas and using separate equipment. However, when equipment is used to process both meat and seafood, such equipment and the area in which it is operated must be thoroughly cleaned before being used to prepare meat products. Batters, breading mixtures, curing solution and the like which contact seafood may not be used to prepare meat food products.

The sorting of clean, sound, wholesome seafood and the handling as outlined above may be permitted in an official establishment provided the operation does not create a nuisance or interfere with inspection by reason of strong odor or otherwise.



318.90 The Regulations state that either fresh beef, cured beef or canned corned beef or a mixture of two or more of these ingredients may be used in the preparation of corned beef hash. Therefore, there are different ways of preparing product meeting the standard. Since the formulas used in these calculations depend on the nature of the meat ingredients used, it is essential that the inspector note on the laboratory form the source of the meat component.

If the analysis of one sample of hash known to have been made primarily from the cooked meat shows between 33 percent and 35 percent meat or that known to have been prepared from fresh meat shows 47 to 50 percent fresh meat, further samples should be taken to determine if the average will show 35 percent or 50 percent, respectively. Results on single sample of hash prepared from cooked meat showing less than 33 percent cooked meat or one prepared from fresh meat showing less than 47 percent fresh meat should be interpreted as representing product containing insufficient meat.

Although inspectional control is the principal basis for determining compliance with the Regulations, results of chemical analysis can be used to supplement this control. The results of analysis for fat and moisture are, of course, to be used as a basis for determining whether or not product is in compliance with respect to these components since limits on these are based on the finished product.

318.91 Fat for deep fat frying of products. The length of time fats and oils may be used for deep fat frying varies with the conditions of use. Particularly important are the frying temperature, the quantity of new fat added daily and the treatment of the fat during use.

Suitability of these fats for further use can be determined from the degree of foaming during use, the color, odor and flavor. Excessive foaming will probably be the first evidence of unsuitability. When the fat or oil foams over the side of the vessel during cooking, it should be discarded. The second most important evidence of unsuitability is darkened color. When the color becomes so dark that it is almost black as viewed through a colorless glass container, it should also be rejected. The inspector should, of course, continue to make the usual gross examinations and reject fat when the odor or flavor becomes objectionable.

The serviceable life of the fat can be extended by holding the temperature of the frying below 400 degrees F., replacing one-third or more of the fat daily, filtering the fat as needed and cleaning the system at least once a week. The addition of an antifoam agent such as methyl polysiloxane to the new fat is also helpful but is ineffective after foaming becomes a problem. It should not be added after the fat or oil foams over the side of the vessel during cooking.

318.92 Red Dye No. 4 is no longer a certified FD&C dye. Its use in meat products is not permitted in federally inspected plants.



318.93 In the processing of animal and vegetable fats at official establishments care must be taken to prevent the mixing of these components unless they have been properly mixed in the preparation of a combination animal and vegetable fat shortening.

The following control procedure shall apply:

A. There shall be a complete separation of the facilities for the receiving and holding of rendered animal fats from the facilities for receiving and holding of vegetable oils. There shall be no permanent connecting pipelines at any point in these preliminary handling operations.

B. Where pumps or lines are used in common, there must be an arrangement for disconnecting and cleaning the lines so there will be no possibility of interchange or mixing of the rendered fats and oils. For those establishments using a common hydrogenating, bleaching, filtering, deodorizing or filling line unit for both types of fats, care must be taken to prevent mixing of the animal and vegetable components (unless the fats have been properly mixed in the preparation of a combination animal fat-vegetable shortening).

Where the vegetable oils and animal fats are to be blended, the pipelines from each system shall end above the level of the contents in the blending tank.

C. Rework product. Both animal and vegetable shortening shall be used in animal-vegetable shortening unless other adequate control measures have been provided. All lines, receiving, holding and storage tanks, must be properly identified at all times.

The inspector will routinely sample incoming shipments of vegetable oils for the possible presence of animal fats. He will retain these samples pending results on finished product. He will take samples of the finished product throughout the day and identify these with the name of the product and code markings when applicable. These samples will be kept in a retaining compartment secured by a Meat Inspection seal. During the week, the inspector will select which finished product samples he will submit to the Meat Inspection Laboratory within the guidelines laid down by the District Director in order to prevent overloading the laboratory. If any evidence of animal fat is found in the finished vegetable shortening, then the corresponding raw vegetable oil samples may be examined to determine whether contamination was the result of contaminated incoming vegetable oils or a result of mishandling of edible animal fats within the establishment. Unused samples should be returned to the plant management.

Samples of animal fat should not be sent to the Meat Inspection Laboratory with a request for specie determination unless the inspector has reason to believe the product is mislabeled, such as tallow in lard or lard in "Beef Tallow."

318.94 All inspectors assigned to rendering or refining establishments are to include in their routine inspection duties a critical examination of samples run through a white filter cloth or filter paper to illustrate any possible contamination that might be present. If the product is solid or semisolid, it should be melted before filtration. At least one such examination should be

made on product representing a production lot. Samples may also be sent to the laboratory serving your Circuit for evaluation, but the detection of contamination should remain an establishment responsibility with the inspector assuring by his own examinations that no visible contaminants are present.

Any lot found to be contaminated with foreign material should be retained and corrective action taken.

318.95 When extenders having 2.0 percent limits are mixed with extenders having 3.5 percent limits, the following amounts of each may be used.

Ounces Per 100 Pounds of Product

<u>2.0 Percent</u>	<u>3.5 Percent</u>
32	0
31	1.8
30	3.5
29	5.3
28	7.0
27	8.8
26	10.5
25	12.3
24	14.0
23	15.8
22	17.5
21	19.3
20	21.0
19	22.8
18	24.5
17	26.3
16	28.0
15	29.8
14	31.5
13	33.3
12	35.0
11	36.8
10	38.5
9	40.3
8	42.0
7	43.8
6	45.5
5	47.3
4	49.0
3	50.8
2	52.5
1	54.3
0	56.0

318.96      The following is permissible in order to inhibit mold growth on dry sausage during drying, storage and transportation.

Potassium sorbate in a  $2\frac{1}{2}$  percent water solution may be applied to dry sausage after stuffing and prior to drying. As an alternate procedure, casings may be dipped in a  $2\frac{1}{2}$  percent solution of potassium sorbate in water before stuffing.

Sausage treated with the potassium sorbate solution as described above must bear proper branding and labeling, such as "dipped in a potassium sorbate solution to retard mold growth."



PART 320 - REPORTS

320.1 Form MI-402-1, Summary of Ante-Mortem Examination, (use is optional) should be filed with the Officer in Charge copy of the post-mortem report.

Form MI-402-2, Identification Card Ante-Mortem, should be completed by a veterinary ante-mortem inspector for each U. S. Suspect animal. Form MI-402-2 should be filed with the Officer in Charge copy of the post-mortem inspection report.

Form MI-403, Ante-Mortem and Post-Mortem Inspection Summary. This form is to be prepared by the veterinarian on final post-mortem inspection. Two copies are required; the original should be sent to the appropriate Market News officer, the duplicate copy is for the Circuit file. An extra copy may be prepared for the establishment, if it is requested.

A no-kill report should be rendered when applicable, except for Sunday.

The information required on the top of the form is self-explanatory for the most part. Do not enter the name of a Subcircuit; always use the name of the parent Circuit. Total hours should be reported in quarter hour increments. Chain speed should be reported as carcasses per hour, and the recorded speed should be the highest chain speed attained during the operation and not related to the carcasses reaching the cooler hourly. "Bed" dressing operations should also be reported in the chain speed "block." The highest actual rate per hour of animals dressed during a day's operations should be reported. Species names to be used are swine, cattle, calves, sheep, goats or horses. A further breakdown for cattle is necessary as indicated on the form; these are bulls, steers, heifers and cows. Stags and uncastrated male cattle dressed on the cattle kill should be reported as bulls. Castrated male cattle dressed on the cattle kill should be reported as steers. All bovine animals dressed on the calf kill should be reported as calves regardless of size or sex.

The supervisory veterinary meat inspector should not only summarize on this form the information contained on Form MI-403-6, Report of Final Post-Mortem Inspection of Retained Carcasses, but also the information recorded on Form MI-402-1, Summary of Ante-Mortem Examination, by the ante-mortem inspector. Each Circuit should maintain its own record of holdovers.

Each block on the form in which entries of diseases and conditions are to be made contains a letter.

In the blocks with the letter "R" should be recorded, opposite the appropriate disease or condition, the retention of carcasses on the regular kill; in the blocks with the letter "S" the disposition of suspects; in the blocks with the letter "A" the condemnations on ante-mortem inspection, and the letter "T" primal parts condemned.

For example, two cattle carcasses on regular kill were passed without restriction on account of actinomycosis, but both heads were condemned. On Form 403 on the line for actinomycosis, the figure "2" should be entered in the block "R" under the heading "without restriction." If the two carcasses were suspects instead of being retained on the regular kill, the figure "2" should be entered in the block "S" under the heading "without restriction." The two heads should be reported as "2" in the "T" block under "Parts." No breakdown should be made between primal parts of suspects and carcasses retained on regular kill. The combined total should be entered in the blocks under the heading "Parts."

Entries on this form should record only the disposition made by the final inspector and not the disposition of carcasses and parts later made by establishment.

Example 2. If Form MI-402-1, Summary of Ante-Mortem Examinations, showed one suspect released, that is, released to a farmer, etc., but not released for slaughter, one carcass condemned for pyrexia and one for emaciation, then on Form 403 at the bottom of the sheet enter the figure 1 in the block opposite "Suspects Released," Code 9315, and the figure 1 in the block opposite "Pyrexia," Code 9535. For the carcass condemned for emaciation, the figure 1 should be entered in the block with the letter "A" under the heading "Condemned," on the line for "emaciation," Code 02.

The primary purpose of this form below the heading "Disposition of Retained Carcasses and Parts," is to record the diseases and conditions found rather than the number of animals found with diseases and conditions which caused the retention of animals. Therefore, a carcass may be reported more than once.

Example 3. A tuberculosis reactor showing lesions may also have actinomycosis; in this case if the carcass was "passed without restriction," the figure 1 should be entered in the "S" block under actinomycosis and again in the "S" block under tuberculosis reactor showing lesions.

Swine, sheep, and goat livers which are condemned should be reported for each establishment in pounds on Form MI-403 under Code 7831. To assure a uniform basis of reporting, the determination of condemned livers in pounds should be developed as follows:

#### A. Swine

It has been determined that 3 pounds per hog is the average liver yield, except that in cases where the slaughter is predominantly sows and boars the average liver yield per hog is 5 pounds. To arrive at the total pounds of livers condemned, multiply by 3 or 5 pounds (average yield) the number of animals slaughtered, and then subtract the total pounds of livers saved for food by the establishment. This will provide the number of pounds of livers and trimmings condemned to be reported on Form MI-403, Code 7831.

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Example: 2,000 (total hogs slaughtered) x 3 = 6,000 (potential yield).

6,000 - 5,400 (pounds packed by establishment) = 600 (pounds of condemned livers).

B. Sheep and Goats

Average liver yield per animal is 1.5 pounds. The same procedure as for swine is used to arrive at the total pounds condemned.

In some cases the total pounds of livers saved by the establishment will not be available until the following day.

The following diseases and conditions which are not listed on Form MI-403, should be reported with the diseases and conditions indicated below. If a disease or condition is found that is not listed below, then the veterinarian should use his professional knowledge in entering the finding. This list should in no way influence the veterinarian in the preparation of Form MI-403-6, Report of Final Post-Mortem Inspection of Retained Carcasses, as he should continue to report diseases and conditions as he finds them.

<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Adenocarcinoma	Carcinoma	40
Adenoma	Misc. Neoplasms	49
Adrenal Gland Tumor	Misc. Neoplasms	49
Agonal Hemorrhages	Gen. Misc.	99
Anaphylactic Reaction	Gen. Misc.	99
Anemia	Misc. Degen. and Dropsic. Cond.	09
Aneurysm	Gen. Misc.	99
Angioma	Misc. Neoplasms	49
Ankylosis	Bone Conditions	82
Anthelmentic Residue	Residue-Drug	04
Antibiotic Residue	Residue-Drug	04



<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Arteriosclerosis	Gen. Misc.	99
Ascites	Misc. Degen. and Dropsic. Cond.	09
Atelectasis	Normal	87
Aujeszky's Disease	Misc. Infectious Disease	29
Balanitis	Misc. Inflammatory Disease	39
Blackleg	Misc. Infectious Disease	29
Bovine Rhinotracheitis	Mucosal Diseases	27
Brisket Disease	Misc. Degen. and Dropsic. Cond.	09
Bronchitis	Misc. Inflammatory Disease	39
Bursitis	Misc. Inflammatory Disease	39
Calcification	Misc. Inflammatory Disease	39
Calculi	Misc. Inflammatory Disease	39
Calf Diptheria	Misc. Infectious Disease	29
Cancer Eye	Epithelioma	41
Cellulitis	Misc. Inflammatory Disease	39
Chlorinated Hydro- carbon Residue	Residue- Pesticide	03

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<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Chronic Granulomatous Disease of Swine	Malignant Lymphoma	42
Cicatrix	Gen. Misc.	99
Cirrhosis	Misc. Inflammatory Disease	39
Clay Pigeon Poisoning	Toxemia	72
Coccidiosis	Misc. Infectious Disease	29
Copper Poisoning	Residue-Other	05
Corneal Dermoid	Misc. Neoplasms	49
Cryptorchid	Sexual Odor	90
Cystitis	Misc. Inflammatory Cond.	39
Cysts, Congenital	Gen. Misc.	99
Defective Stick Wound	Asphyxia	81
Delayed Evisceration	Contamination	83
Demodectic Mange	Skin Conditions	91
Dermatitis	Skin Conditions	91
Diamond Skin	Skin Conditions	91
Distomiasis	Misc. Parasitic Cond.	59
Dropsy	Misc. Degen. and Dropsic. Cond.	09
Echinococciasis	Misc. Parasitic Cond.	59
Edema	Misc. Degen. and Dropsic. Cond.	09

<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Embryonal Nephroma	Misc. Neoplasms	49
Empyema	Abscess; Pyemia	70
Endocarditis	Pericarditis	35
Eperythrozoonosis	Misc. Infectious Disease	29
Ergot Poisoning	Misc. Inflammatory Disease	39
Erythema	Skin Condition	91
Exotosis	Bone Condition	82
Fat Necrosis	Misc. Degen. and Dropsic. Cond.	09
Feed Additive Residue	Residue-Drug	04
Fibroma	Misc. Neoplasm	49
Fistula	Abscess; Pyemia	70
Folliculitis	Skin Condition	91
Fracture	Bruises; Injuries	86
Fungicide Residue	Residue-Pesticide	03
Gall Bladder Tumor	Misc. Neoplasm	49
Gangrene	Misc. Inflammatory Disease	39
Goiter	Gen. Misc.	99
Granulosa Cell Tumor	Misc. Neoplasm	49
Hemangioma	Misc. Neoplasm	49
Hematuria	Gen. Misc.	99
Hematoma	Bruises; Injuries	86



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<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Hemochromatosis	Misc. Pigmentary Cond.	69
Hemoglobinuria	Gen. Misc.	99
Hepatization, Pulmonary	Pneumonia	36
Hepatoma	Misc. Neoplasm	49
Herbicide Residue	Residue-Pesticide	03
Hernia	Gen. Misc.	99
Hydrocephalus	Misc. Degen. and Dropsic. Cond.	09
Hydronephrosis	Misc. Degen. and Dropsic. Cond.	09
Hydrothorax	Misc. Degen. and Dropsic. Cond.	09
Hyperkeratosis	Gen. Misc.	99
Hyperplasia	Misc. Inflammatory Disease	39
Hypoderma Sp.	Misc. Parasitic Cond.	59
Induration	Misc. Inflammatory Disease	39
Infarct	Misc. Inflammatory Disease	39
Influenza	Misc. Infectious Disease	29
Iron Residue (Injectable)	Residue-Drug	04
Joint-III	Misc. Infectious Disease	29
Keratitis	Misc. Inflammatory Disease	39
Kidney Worms	Stephanuriasis	52

<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Kyphosis	Bruises; Injuries	86
Laminitis	Misc. Inflammatory Disease	39
Lordosis	Bruises; Injuries	86
Lungworms	Misc. Parasitic Cond.	59
Lymphadenoma	Misc. Neoplasm	49
Lymphoblastoma	Malignant Lymphoma	42
Lymphocytoma	Malignant Lymphoma	42
Lymphoma	Malignant Lymphoma	42
Lymphosarcoma	Malignant Lymphoma	42
Melanosarcoma	Sarcoma	43
Mesenteric Emphysema	Gen. Misc.	99
Mesothelioma	Misc. Neoplasm	49
Metallic (Heavy Metal) Poisoning	Residue-Other	05
Mucormycosis	Misc. Infectious Disease	29
Nasal Granuloma	Misc. Infectious Disease	29
Neoplasm	Misc. Neoplasm	49
Nerve Sheath Tumor	Misc. Neoplasm	49
Ochronosis	Misc. Pigmentary Cond.	69
Oesophagostomiasis	Misc. Parasitic Cond.	59
Omphalophlebitis	Misc. Inflammatory Cond.	39
Orchitis	Misc. Inflammatory Cond.	39

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<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Organic Phosphate Residue	Residue-Pesticide	03
Ostempyesis	Bone Condition	82
Osteohemachromatosis	Bone Condition	82
Osteomyelitis	Bone Condition	82
Osteitis	Bone Condition	82
Otitis	Misc. Inflammatory Disease	39
Pale Muscle Tissue of Swine	Normal	87
Papilloma	Misc. Neoplasm	49
Pentastomiasis	Misc. Parasitic Cond.	59
Periarteritis Nodosa	Misc. Inflammatory Cond.	39
Periostitis	Bone Condition	82
Phlebitis	Misc. Inflammatory Disease	39
Photosensitization	Skin Condition	91
Pin Point Nodes	Abscess; Pyemia	70
Piroplasmosis	Misc. Infectious Disease	29
Placenta, Retained	Metritis	33
Pneumonitis	Pneumonia	36
Polioencephalomalacia	Misc. Inflammatory Disease	39
Porphyria (Pink Tooth)	Misc. Pigmentary Cond.	69
Proctitis	Misc. Inflammatory Disease	39



<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Prolapse (Rectal Uterine or Vaginal)	Misc. Inflammatory Disease	39
Prophylactic Residue	Residue-Drug	04
Pyometra	Metritis	33
Pyelonephritis	Nephritis; Pyelitis	34
Rhinitis	Misc. Inflammatory Disease	39
Sarcomatosis	Sarcoma	43
Sarcosporidiosis	Misc. Parasitic Cond.	59
Scabies	Skin Condition	91
Scoliosis	Bruises; Injuries	86
Sinusitis	Misc. Inflammatory Disease	39
Soft Fat of Swine	Normal	87
Steatitis	Misc. Inflammatory Disease	39
Steatosis	Normal	87
Stephanurus dentatus	Stephanuriasis	52
Stomach Worm	Misc. Parasitic Cond.	59
Stomatitis	Misc. Inflammatory Disease	39
Streptothricosis	Misc. Infectious Disease	29
Sulfa Residue	Residue-Drug	04
Teratoma	Misc. Neoplasm	49
Therapeutic Residue	Residue-Drug	04
Thorny Headed Worm	Misc. Parasitic Cond.	59

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<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Thrombi	Misc. Inflammatory Disease	39
Thymoma	Misc. Neoplasm	49
Tranquilizer Residue	Residue-Drug	04
Ulcer	Misc. Inflammatory Cond.	39
Urticaria	Skin Condition	91
Vaginitis	Misc. Inflammatory Disease	39
Vesicular Exanthema	Vesicular Disease	28
White Muscle Disease	Misc. Inflammatory Disease	39
White Spotted Kidneys of Calves	Nephritis; Pyelitis	34
Xanthosis	Misc. Pigmentary Cond.	69

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<u>Unlisted Disease or Condition</u>	<u>Report on Form MI-403 as:</u>	<u>Code No.</u>
Actinomycosis	Misc.	7831
Congestion	Misc.	7831
Gallstones	Misc.	7831
Hobnail Liver	Cirrhosis	4831
Nutmeg Liver	Cirrhosis	4831
Stephanuriasis	Other Parasitic Conditions	6831

320.2 MI-404 Processing Operations at Official Establishments. Form MI-404 is a three part snap-out form. It should be completed and the original and one copy submitted to the local Meat Inspection office as soon as possible, but not later than the Thursday following the close of each weekly reporting period. The third copy is for the files of the official establishment.

This deadline must be met in order for us to release this information for publication in trade journals and official Government publications, approximately 10 days after the close of each weekly reporting period.

Form MI-404 is a weekly form which has a space under each item in the first group for you to report the number of pounds of product prepared or processed each day, Sunday through Saturday, and to report the weekly totals for each item. Of course, the weekly total of an item should equal the sum of the daily entries of the item. The items in the second group constitute a breakdown of the "Canned Product Item," in the first group.

The "Canned Product Item," No. 590, in the first group should include all canned product regardless of where and to whom it is to be sold, but the items in the second group should not include canned product prepared for any government agency. The chopped meat (beef and pork) prepared and processed under CSS Contracts should be reported under items 781 and 782 "Breakdown of Canned Product," in addition to reporting it in the usual designated product food code of 590.

The total poundage for the combined amount of dry and semi-dry sausage removed from the drying room during a week should be reported on the Form MI-404. This should be a weekly total only. The following should, therefore, be typed along the right hand margin of the form; "Dried; Semi-dried sausage removed - Pounds, Code 329."

In order to keep the reporting from establishments uniform, there is no space for "write in," items nor should a heading, printed on the form, be crossed out and the other item substituted as the code number for the printed item identifies that item on the IBM card. In the event that you have prepared or processed an item that is not listed on the form, you should consult the following table.

The items listed below should be reported under the following headings:

#### Meat and Meat Food Products (Not Canned)

In the columns "Placed in Cure", do not include chopped meat placed in cure for use at the same establishment in the preparation of sausage, luncheon meats, spiced ham, etc.

Beef. 010	Report the green weight of all Beef Cuts and Beef Products going to cure. This includes Beef Tripe, Beef Briskets, Beef Tongue, Beef Hams, etc.
Pork. 020	Report the green weight of all pork items going to cure. This includes Hams, Bellies, Picnics, Shoulders, Butts, Hocks, Plates, Feet, Tongues, Lips, Snouts, Fat Backs, Jowls, etc.
Other. 030	Report the green weight of any lamb, mutton, or veal cuts or products from these two species placed in cure.



## Section 320.2

Smoked and/or Dried Beef. Report the finished smoked or dried weight of all  
110 beef cuts and beef products which have been smoked or dried. This  
includes beef tongues, beef hams, etc.

Smoked and/or Dried Pork. Report the finished smoked or dried weight of all  
120 pork items which are smoked or dried. This includes hams, ready-to-  
eat hams (excluding hams, for canning), shoulders, picnics, bacon,  
butts, loins, coppa, capicola, Italian style ham, knuckles, hocks,  
spareribs, jowls, etc.

Do not include in the "Cooked Meats" columns meat cooked as a part  
of the preparation of canned products, sausage, or similar products.

Cooked Beef. Report the cooked weight of cooked beef tongues, cooked corned  
210 beef, etc.

Cooked Pork. Report the cooked weight of any pigs feet, pork tongues, hams,  
220 picnics, loin rolls, etc.

Other Cooked Meats. Report cooked weight of any lamb, mutton, and veal that  
230 is cooked or scalded.

Sausage, Fresh Finished. Lamb chopped, veal chopped, breakfast sausage,  
310 and pork sausage.

Sausage to be Dried or Semi-dried. Report the weight going into the drying  
320 room, of salami, cervelat, pepperoni, all forms of summer sausage,  
cotto salami, smoked thuringer, and pork roll (chopped meat), and  
any other types of dried or semi-dried sausage products.

Smoked and/or Cooked - Franks and Wieners. Report the finished weight of  
330 all frankfurters and wieners.

Sausage Smoked or Cooked - Other. Report the finished weight of bologna,  
340 liver sausage, smoked pork sausage, polish sausage, luncheon meat in  
casings or bags, garlic sausage, New England brand sausage, minced,  
roll, blood and tongue sausage, and all other smoked or cooked  
sausage, not included in Code Nos. 330 and 410. Cooked ham, butts, or  
picnics are not to be included under any of the sausage classifica-  
tions.

Loaf, Head Cheese, Chili Con Carne, Jellied Products, Etc. Souse, sulze,  
410 scrapple, liver pudding, blood pudding, chop suey, imitation sausage,  
imitation chicken, tamales (not canned), and turnovers.

Steaks, Chops, and Roasts. Report the actual production of packed and to  
420 packed fresh cuts, cube steaks, sandwich steaks, minute beef steaks,  
pork chops, packed fresh cuts, fabricated meat, steaks, chops, roasts  
and stew meat, and all other processed packed cuts, fresh or frozen.  
This item should reflect operations in hotel and restaurant supply  
departments wherein pork chops, lamb chops, veal chops, pork steaks,  
ham steaks, beef steaks, and all kinds of roasts are prepared.

This item should also include cube steaks, sandwich steaks, and other similar items prepared in individual serving style, as well as chunk meats for stews, and liver which has been sliced for serving. It should also include beef that is prepared for the Army in the 3- or 4-way style. Do not include organs or byproducts requiring no further processing or primal bone-in or boneless cuts which individually bear the marks of Federal inspection, such as ribs, loins, hams, picnics.

Meat Extract. Products prepared with meat extract.

430

Sliced Product - Bacon. Report the actual production of all sliced bacon, including bacon ends and pieces.

440

Sliced Product - Other. Report the actual production of all sliced dried beef and any other sliced product, such as sliced sausage and loaves.

450

Hamburger. Report the actual production of all chopped beef to be sold as hamburger or as chopped beef.

460

Miscellaneous Meat Food Products. Include chitterlings, cattle and calf feet scalded, calf heads, cooked tripe, cooked pork stomachs, and other processed products. Do not include fats, oils, leaf lard and compounds or canned meat or products that do not require further processing, such as brains, livers, hearts, kidneys, sweetbreads, etc.

470

Lard Rendered. Report the actual production of prime steam lard, open kettle rendered lard, and dry rendered lard. It is recognized that there will be duplication between lard reported here and lard refined to be reported under item 520.

510

Lard Refined. Lard hydrogenated, refined, lard open kettle refined, lard prime steam refined, and lard oil.

520

Oleo Stock. Report the actual production of oleo stock which is not further processed and the actual production of oleo oil and oleo stearine.

530

Edible Tallow. Beef fat rendered and mutton fat rendered.

540

Compound Containing Animal Fat. Puff paste shortening; shortening prepared with animal fat; and miscellaneous fats and oils.

570

Oleomargarine - Containing Animal Fat. Report the total production of all oleomargarine containing oleo, lard, rendered pork fat, or any other animal fats.

580

Meat and Meat Food Products (Canned)

A. Items listed by code number and categories:

611-612 Luncheon Meat

Ham-Chopped  
Ham-Chopped with Raisin Sauce  
Ham-Spiced  
Ham-Spiced Loaf  
Luncheon Meat (Except Beef, See Codes 721-722)  
Pork, Chopped  
Pork, Corned  
Pork, Loaf

621-622 Hams (Whole or Fractional)

Ham - (No Refrigeration Necessary)  
Ham - (Requiring Refrigeration)  
Ham - Smithfield Slices

631-632 Beef Hash

Corned Beef Hash  
Roast Beef Hash

641-642 Chili Con Carne

Chili Con Carne  
Chili Con Carne with Beans

651-652 Viennas

Sausage, Vienna  
Sausage, Vienna, in Barbecue Sauce  
Sausage, Vienna, Ends and Pieces

661-662 Franks; Wieners in Brine and Sauce

Frankfurters  
Frankfurters - Cocktail  
Wieners  
Wieners with Barbecue Sauce  
Wieners, Cocktail, with Sauce



671-672 Deviled Ham

Ham - Deviled

681-682 Other Potted or Deviled Meat Food Products

Potted and Deviled Meats (Spread)

Meat Spread

Bacon Spread

Corned Beef Spread

Liver Spread

Tongue Spread

Tongue - Deviled

691-692 Tamales

Tamales

Tamales with Chili Gravy

Tamales, Cocktail in Broth

711-712 Sliced Dried Beef

Beef - Dried - Sliced

721-722 Chopped Beef

Beef - Chopped

Beef - Loaf

731-732 Meat Stew (All Product)

Beef - Stew

Lamb - Stew

Ox Tail Ragout

741-742 Spaghetti Meat Products (All Types)

Chili - Spaghetti

Chili - Spaghetti with Meat, Beans, Sauce

Spaghetti and Meat with Sauce

Spaghetti and Meat Balls

751-752 Tongue (Other Than Pickled)

Ox or Beef Tongue

Tongue, Lamb, Pork

761-762 Vinegar Pickled Products

Pigs Feet  
Pork Feet Cutlets  
Pork Hocks, Vinegar Pickled  
Sausage, Vinegar Pickled

771-772 Sausage

Sausage - Pork  
Sausage, Pork Patties  
Sausage - Bulk  
Sausage - Link  
Sausage - Cocktail

781-782 Hamburger, Roasted or Corned Beef, Meat and Gravy

Beef Brisket  
Beef - Corned  
Beef and Gravy  
Beef and Kidneys in Gravy  
Beef - Meat Balls  
Beef - Cocktail Meat Balls  
Beef - Roast  
Beef - Sandwich Steaks  
Beef - Steak and Brown Gravy  
Hamburgers  
Pork and Gravy

791-792 Soups

Soups

811-812 Sausage in Oil

Sausage in Oil

821-822 Tripe

Tripe

831-832 Brains

Brains

## 841-842 Canned Loins and Picnics

Canned Pork Loins

Canned Picnics

## 851-852 or 861-862 All Other with Meat and/or Meat Byproducts

Baby Foods

Bacon

Bacon (Vacuum Packed)

Beef with Barbecue Sauce

Brown Gravy with Sliced Beef

Brown Gravy with Sliced Pork

Frankfurters and Beans

Frankfurters and Sauerkraut

Ham - Hash

Liver - Loaf

Liverwurst

Mutton - Corned

Pork with Barbecue Sauce

Scrapple

Beans with Ham

Beans with Bacon

Beef Chop Suey

Corned Beef and Cabbage with Potatoes

Enchiladas with Meat in Chili Sauce

Ham a la King

Pate de Foie with or without Truffles

Ravioli with Meat

Sauerkraut and Franks

Spareribs, Sauerkraut, Potatoes

Veal Loaf

## B. Items listed alphabetically:

Product	Report on Form MI-404 under the heading	Code No.
Baby Foods	All Other with Meat and/or Meat Byproducts	851-862
Bacon	All Other with Meat and/or Meat Byproducts	851-852
Bacon (Vacuum Packed)	All Other with Meat and/or Meat Byproducts	851-852
Bacon Spread	Other Potted or Deviled Byproducts	681-682



## Section 320.2(B)

Product	Report on Form MI-404 under the heading	Code No.
Beans with Bacon	All Other with Meat and/or Meat Byproducts	861-862
Beans with Ham	All Other with Meat and/or Meat Byproducts	861-862
Beef - Brisket	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef - Chopped	Chopped Beef	721-722
Beef Chop Suey	All Other with Meat and/or Meat Byproducts	861-862
Beef - Corned	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Corned Beef and Cabbage with Potatoes	All Other with Meat and/or Meat Byproducts	851-852
Corned Beef Hash	Beef Hash	631-632
Corned Beef Spread	Other Potted or Deviled Meat Food Products	681-682
Beef - Dried Sliced	Sliced Dried Beef	711-712
Beef and Gravy	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef and Kidneys in Gravy	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef - Loaf	Chopped Beef	721-722
Beef - Meat Balls	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782

Product	Report on Form MI-404 under the heading	Code No.
Beef - Cocktail Meat Balls	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef - Roast	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef - Roast Beef Hash	Beef Hash	631-632
Beef - Sandwich Steaks	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef - Steak and Brown Gravy	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Beef - Stews	Meat Stew (All Products)	731-732
Beef with Barbecue Sauce	All Other with Meat and/or Meat Byproducts	851-852
Beef with Natural Juices	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Brains	Brains	831-832
Brown Gravy with Sliced Beef	All Other with Meat and/or Meat Byproducts	851-852
Brown Gravy with Sliced Pork	All Other with Meat and/or Meat Byproducts	851-852
Chili Con Carne	Chili Con Carne	641-642
Chili Con Carne With Beans	Chile Con Carne	641-642
Chili - Spaghetti	Spaghetti Meat Products	741-742
Chili - Spaghetti With Meat, Beans, Sauce	Spaghetti Meat Products (All Types)	741-742

## Section 320.2(B)

Product	Report on Form MI-404 under the heading	Code No.
Enchiladas with Meat in Chili Sauce	All Other with Meat and/or Meat Byproducts	851-852
Frankfurters	Franks, Wieners in Brine and Sauce	661-662
Frankfurters and Beans	All Other with Meat and/or Meat Byproducts	851-852
Frankfurters - Cocktail	Franks, Wieners in Brine and Sauce	661-662
Frankfurters and Sauerkraut	All Other with Meat and/or Meat Byproducts	851-852
Ham (No Refrig- eration Necessary)	Canned Hams (Whole or Fractional)	621-622
Ham (Requiring Refrigeration)	Canned Hams (Whole or Fractional)	621-622
Ham a la King	All Other with Meat and/or Meat Byproducts	851-862
Ham - Chopped	Luncheon Meat	611-612
Ham - Deviled	Deviled Ham	671-672
Ham - Hash	All Other with Meat and/or Meat Byproducts	851-852
Ham - Chopped with Raisin Sauce	Luncheon Meat	611-612
Ham - Smithfield Slices	Canned Hams (Whole or Fractional)	621-622
Ham - Spiced	Luncheon Meat	611-612
Ham - Spiced Loaf	Luncheon Meat	611-612
Hamburgers	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Lamb - Stew	Meat Stew (All Products)	731-732



Product	Report on Form MI-404 under the heading	Code No.
Liver - Loaf	All Other with Meat and/or Meat Byproducts	851-852
Liver - Spread	Other Potted or Deviled Meat Food Products	681-682
Liverwurst	All Other with Meat and/or Meat Byproducts	851-852
Luncheon Meat (Except All Beef)	Luncheon Meat	611-612
Meat Spread	Other Potted or Deviled Meat Food Products	681-682
Mutton - Corned	All Other with Meat and/or Meat Byproducts	851-852
Ox Tail Ragout	Meat Stew (All Product)	731-732
Ox Tongue	Tongue (Other than Pickled)	751-752
Beef Tongue	Tongue (Other than Pickled)	751-752
Pate de Foie with or without truffles	All Other with Meat and/or Meat Byproducts	851-852
Picnics, Canned	Canned Loins and Picnics	841-842
Pigs Feet	Vinegar Pickled Products	761-762
Pork, Chopped	Luncheon Meat	611-612
Pork - Corned	Luncheon Meat	611-612
Pork Feet Cutlets	Vinegar Pickled Products	761-762
Pork Hocks, Vinegar Pickled	Vinegar Pickled Products	761-762
Pork, Loaf	Luncheon Meat	611-612
Pork, Loin	Canned Loins and Picnics	841-842

## Section 320.2(B)

Product	Report on Form MI-404 under the heading	Code No.
Pork and Gravy	Hamburger, Roasted or Corned Beef, Meat and Gravy	781-782
Pork with Barbecue Sauce	All Other with Meat and/or Meat Byproducts	851-852
Potted and Deviled Meats (Spread)	Other Potted or Deviled Meat Food Products	681-682
Ravioli with Meat	All Other with Meat and/or Meat Byproducts	861-862
Sauerkraut and Franks	All Other with Meat and/or Meat Byproducts	851-852
Sausage - Bulk	Sausage	771-772
Sausage - Pork	Sausage	771-772
Sausage - Link	Sausage	771-772
Sausage - Cocktail	Sausage	771-772
Sausage in Oil	Sausage in Oil	811-812
Sausage, Pork, Patties	Sausage	771-772
Sausage - Vienna	Viennas	651-652
Sausage - Vienna, in Barbecue Sauce	Viennas	651-652
Sausage - Vienna, Ends and Pieces	Viennas	651-652
Sausage, Vinegar Pickled	Vinegar Pickled Products	761-762
Scrapple	All Other with Meat and/or Meat Byproducts	851-852
Soups	Soups	791-792
Spaghetti and Meat with Sauce	Spaghetti Meat Products (All Types)	741-742

Product	Report on Form MI-404 under the heading	Code No.
Spaghetti and Meat Balls	Spaghetti Meat Products (All Types)	741-742
Spareribs, Sauer- kraut, Potatoes	All Other with Meat and/or Meat Byproducts	851-852
Tamales	Tamales	691-692
Tamales with Chile Gravy	Tamales	691-692
Tamales, Cocktail, in Broth	Tamales	691-692
Tongue, Lamb, Pork	Tongue (Other than Pickled)	751-752
Tongue, Spread	Other Potted or Deviled Meat Food Products	681-682
Tongue, Deviled	Other Potted or Deviled Meat Food Products	681-682
Veal, Loaf	All Other with Meat and/or Meat Byproducts	851-852
Tripe	Tripe	821-822
Wieners	Franks, Wieners in Brine and Sauce	661-662
Wieners with Barbecue Sauce	Franks, Wieners in Brine and Sauce	661-662
Wieners, Cocktail with Sauce	Franks, Wieners in Brine and Sauce	661-662



## Section 320.2(B)

The inspector who approves the report must be sure that:

- A. The establishment actually processed all of the items reported.
- B. No item has been omitted.
- C. The amounts shown are reasonably correct.
- D. Items are reported in the correct column.

320.3 MI-407, Meat and Meat Food Products Condemned on Reinspection and Destroyed. Only one class of product and one cause can be reported on each MI-407. Use only the classes of product and causes of condemnation printed on the form. When meat food product fabricated from more than one class of meat or meat byproduct is condemned, for purposes of reporting on this form, the predominant meat or meat byproduct component of the condemned product shall determine the class. When there is no rejection at the Circuit during the calendar month, a report should be submitted with statement, "There were no meat or meat food products condemned on reinspection and destroyed at this Circuit during the month of \_\_\_\_\_. " Product such as fat and bones intentionally diverted by an official establishment to inedible channels, even when such product is decharacterized, should not be reported on this form. A copy of this form may be furnished the establishment on request. The inspector must not under any circumstances identify the rejections on Form MI-407 with any particular shipment or product received at the establishment. He is not in a position to maintain identity of incoming shipments to the extent that he can certify that the contamination was present at the time it was received nor is he in a position to certify to the amount of trimming necessary to bring the product into compliance. Therefore, he may issue the condemnation form at the request of the packer, but it would merely state that on any particular date a certain amount of product was condemned. The inspector should not allow the packer to use MI-407 as a means of obtaining repayment or adjustment from the shipper.

320.4 MI-407-4, Materials Rejected for Use. One form should be prepared, in duplicate, for each material rejected, and the original of the completed form should be sent to the Meat Inspection Program Records Unit, Chicago, Illinois, along with other MI reports. The duplicate copy is for the Circuit files. When there is no rejection at the Circuit during a calendar month, a report should be completed with the notation, "There were no materials rejected at this Circuit during the month of \_\_\_\_\_. "

The left side of the report is for coding. One code number in each group is to be circled. In the spaces, on the right, the inspector is to write in detail the description of the material rejected, the cause, the disposition and the official agency notified. The quantity rejected should always be reported in pounds, if possible.

To assist you in determining under what categories items should be placed on the form, we have prepared the following lists:

A. Groupings For Classes of Materials Rejected.

1. Spices and Seasonings:

salt	nutmeg
sugar	allspice
pepper (black, red, white)	sage
monosodium glutamate	dextrose
paprika	seeds
garlic	dill
oregano	caraway
chili mix/powder	fennel
bar-b-q powder	mustard
mace	seasonings
thyme	sausage
onion powder	bologna
ground spice	loaf
anise	ham spices .
smoke flavoring	sauces
cinnamon	hot
coriander	pizza
	honey
	syrup
	vinegar

2. Flour and Cereal Products:

wheat flour	wheat cereal
corn flour	potato starch
soya flour	bread
barley	batter mix
potato	cracker meal
rolled oats	corn meal
barley	macaroni
rice	spaghetti
farina	noodles
cereal binder	tapioca flour

3. Dairy and Egg Products:

nonfat dry milk	sodium caseinate
whole milk	eggs, whole, fresh
whole skim milk	egg white, fresh,
dry whole milk	frozen, powdered
whey	egg yolks, fresh,
breeding mix dip	frozen, powdered
process cheese spread	

4. Fruits or Vegetables (Fresh, Canned, or Dehydrated):

potatoes	pickles
peas	olives
carrots	beans
parsley	bean sprouts
onion	
pimientos	
tomatoes, fresh	
paste	
puree	
juice	

5. Soaps, Cleaners, Oils:

tripe cleaner	boiler compounds
toilet cleaner, etc.	metal cleaner
floor cleaner	clothes cleaners
oakite	hand soaps
general cleaner	mineral oil
brick cleaner	cotton seed oil
	paraffin

6. Equipment:

lard drums	string
ink	rope
cartons	jars
cording	bottles
paper	cans
plastic products	covers (lids)

7. Casings (Natural and Artificial):

casings  
plastic overwraps  
visking bags

8. Curing Agents:

pickle	prague powder
cures	sal brine
westphalia powder	

9. Miscellaneous:

bicarbonate of soda	antioxidants to prevent
vitamins	discoloration
gelatin	tenderizers
monoglycerides	vegetable oleo-
stabilizers	margarine



## B. Grouping For Cause of Rejection of Materials.

## 1. Not in Compliance with Federal Regulations:

label not approved for use of rejected product  
product not labeled  
unauthorized color or flavor  
ingredients in excess of authorized allowances  
insufficient ingredients  
manufacturer and/or address unknown  
improper markings on product  
product contains prohibited ingredients

## 2. Contamination:

contains insects and/or weevils  
contains foreign material  
rodent contamination present  
wormy  
unclean

## 3. Objectionable Odors, Taste, or Color:

excessive odors  
over age  
unstable color  
rancid

## 4. Sour, Moldy:

decomposed  
toxic

## 5. Unsound Canned Goods:

## 6. Unacceptable Equipment:

previously used cartons, boxes, barrels  
rusty  
improper operation  
broken or cracked  
chipped or peeling lining

## 7. Other:

C. Groupings For Classes of Disposition of Material Rejected.

1. Removed from the Establishment:

converted into animal feeds  
used in nonfood departments

2. Returned to Manufacturer or Supplier:

3. Destroyed by Establishment:

sewerage  
burned  
garbage  
denatured and removed  
tanked

4. Held for Food and Drug Administration:

5. Other:

320.5 MI-412, Application for Export Certificate and/or Stamps. In Section A, No. 4, the exporter is to check whether a certificate and stamps are requested or stamps only. In No. 5, only one block should be checked since only one type of certificate and/or stamps can be requested on one form. We believe that there is sufficient space for the exporter to list all the products he wishes to export under one certificate in Section A, of No. 10 A and B. In Section B, No. 6, check the block "Yes but this is an additional report," when a certificate is issued in lieu of another certificate. All the items reported in 10 A and B of Section A have to be reported in one or more of the blocks in Part 7, "Product Codes and Pounds Exported," of Section B.

320.6 Form MI-422. The designations and instructions included on Form MI-422 are generally self-explanatory and should be followed closely. Item number 4 should be checked when the sample is collected at the retail level, and Item number 5 should be checked when the sample is collected by the supervisor. The product code called for in Item 9 is found on MI Form 422-A (October 1963). Do not assign a code number for nonmeat food products or samples for analysis for specification compliance work.

In those cases where both cereal and nonfat dry milk are added, check only the nonfat dry milk product code. Where a code is not indicated for a specific product, record it under miscellaneous of the general category -- examples, "Luncheon Meat Sausage - Code 340-91."

The area and station codes are the same as used on Form MI-404. The laboratory codes are as follows:

<u>Name of Laboratory</u>	<u>Code</u>
Chicago, Illinois	1
New York, New York	2
St. Louis, Missouri	3
Kansas City, Kansas	4
East Point, Georgia	5
San Francisco, California	6
Washington, D. C.	7
Omaha, Nebraska	8
Beltsville, Maryland	9

The laboratory will complete "Date of Findings," "Lab. No." and anything else omitted in the heading. The inspector will be notified if these omissions are extensive.

320.7 A new form, MI Form 437, "Notice of Receipt of Unclean or Unsound Product," is available and should be used when federally inspected product is received at an official establishment and the condition of the product upon arrival reflects unfavorably on the proper preparation or the transportation of the product from the originating establishment. The form should be executed by the receiving station in quadruplicate. One copy should be forwarded to the District Director of the originating Circuit (where product was prepared); two copies forwarded to the originating Circuit; and one copy placed on file at the receiving station.

The condition reported will be checked into at the originating Circuit and a record of the findings and action taken will be recorded on the back of the forms. One copy will be placed on file at the originating Circuit and the remaining copy will be forwarded to the District Director of the originating Circuit.

The purpose of this form is to furnish the Officer in Charge at the originating establishment with information to assist him in requiring correction of establishment procedures. Therefore, it is essential that the information on contamination and its probable cause be as complete as possible--Was it caused by metal particles eroded from metal hooks? Were the quarters wrapped or covered? Was it dressing floor contamination? What type? This information is essential if the form is to serve a useful purpose to the receiving inspector.

The form is intended for internal use of the Program and is not to be issued to the establishment.

320.8 MI Form 441 has been developed to provide for the identification of labels that are transferred between Circuits in accordance with Section 317.13 of the Meat Inspection Regulations. The instructions printed thereon cover its usage and distribution.



## Section 320.9

320.9 MI Form 442 will aid inspectors in the review of proposed sketches and labeling material prior to their being forwarded to the Labels, Standards and Packaging Branch. The form was designed to be used as a tool by the inspector for making his review both comprehensive and systematic. The remarks section should be used to give additional information relevant to the review of the label and otherwise make the communication between the reviewing inspector and the Washington Labels, Standards and Packaging Branch as effective as possible.

One copy of the check list should be completed and forwarded with each label or sketch submitted for approval.

PART 321 - APPEALS

321.1 When an inspector's decision is questioned, the Officer in Charge makes a report to the appropriate District Director.

PART 322 - COOPERATION WITH LOCAL AUTHORITIES

322.1

A. Information furnished by meat inspection stations when diseased conditions are found among animals at slaughtering establishments, and giving point of origin, has been of great value in assisting Federal and State officials in controlling communicable diseases of livestock. This has been especially true with such diseases as tuberculosis, hog cholera, swine erysipelas, anthrax, vesicular diseases, cysticercosis, and various parasitic infestations.

All cases of such diseases as anthrax, blue tongue, cysticercosis in swine, hog cholera, scabies, scrapie, tuberculosis in cattle and the vesicular diseases should be reported. In cases where lots of animals are affected with such diseases as contagious ecthyma, cysticercosis in cattle, foot rot, mucosal complex, swine erysipelas and tuberculosis in swine, they should be reported. All information regarding the identity of the animal and its origin should be furnished. In case of scrapie or scabies the ANH inspector would like to see the animal. Because of the importance of this phase of our work, the Officer in Charge should give it his close attention and see that the necessary reports are forwarded.

Owners and operators of official establishments will recognize that aid given in the identification of lots of diseased animals will serve to further reduce the incidence of the disease among the livestock population in the areas served by such establishments, a reduction which will shortly be reflected in a direct return to both the producer and the packer through the avoidance of loss by condemnation of diseased animals or their carcasses.

B. Meat Inspection Program veterinarians are an essential part of the first defense team against accidental or intended introduction of foreign livestock disease which may gain entrance to this country. This would include diseases such as foot-and-mouth disease, rinderpest, African swine fever, contagious bovine pleuropneumonia, and Techen's disease.

With the rapid expansion of air freight services and the common practice of transporting livestock long distances by truck for slaughter, a domestic or foreign disease could be widely disseminated in a matter of hours.

Program veterinarians should study literature on foreign or rare domestic diseases and be alert to any symptoms not commonly observed in slaughter animals. If suspicious symptoms are observed, the nearest Animal Health Division field veterinarian should be contacted. If he cannot be reached the ANH veterinarian in charge in the State should be notified.

The ANH Division has an "Emergency Disease Eradication Organization" ready to go to work in each State.

The Washington office of Operations Branch Livestock Slaughter Division should also be notified.



322.2 The reports made by inspectors will be on Form ANH-2-11C except those reporting tuberculosis. The original should be forwarded to Livestock Slaughter Inspection Division at Washington, one copy to the Veterinarian in Charge of the State of origin of the animals covered by the report, and a copy to the appropriate State livestock sanitary official of the State of origin. The form forwarded to Livestock Slaughter Inspection Division should be noted to show that the required distribution has been made of other copies of the report.

322.3 Form ANH-6-35 "non-reactors showing tuberculosis lesions" should be used by veterinary meat inspectors for reporting lesions of tuberculosis found during slaughter of all non-reacting bovine animals and whenever extensive tuberculosis infection in lots of swine is encountered. All animals found to have tuberculosis lesions as well as those which show lesions suspicious of tuberculosis should be reported even though all of the information about the origin of the animal cannot be obtained.

Each form completed should be identified in the upper right-hand corner by the establishment number where the animal was slaughtered and a case number starting with number 1 on July 1 of each year and running consecutively at each establishment. The form should be distributed in accordance with instructions appearing on it. Inspectors should furnish all information available about the identity of the animal in the space provided on the form.

#### 322.4

A. In some instances, the identity of cattle is established at the slaughtering plant through the medium of eartags, stockyards sales tags, and similar identifying devices. In many instances, cattle from Western States can be identified more positively by means of hide brands. These brands are registered with the livestock authorities of the States and are identified as the cattle move through the sales barns, stockyards, and the like. Whenever possible, these brand identifications are to be shown along with eartag numbers and other identifying features on Forms ANH-2-11C and ANH-6-35 reports. Brand inspectors are located at many livestock centers. It is suggested that they be asked to assist in the brand identification of diseased animals.

B. The origin of animals that show tuberculosis lesions may be determined by the identifying tags on the animals when they are slaughtered. Inspectors should remove such identifying devices and hold them for at least 60 days following the date of the report to the Animal Health Division on Form ANH-6-35. This gives the field veterinarian an opportunity to obtain the identifying tag if this becomes necessary.

All information on both sides of the eartag or similar identifying device should be shown on Form ANH-6-35. It would also be helpful to show the composition or other description of the tag.

C. A three-section identification tag has been successfully used to identify the origin of cattle when tuberculosis is detected on regular kill. This method is particularly useful when the removal of the hide is done sometime before evisceration.

The three-section tag is used in place of the two-part carcass identification tag currently used in most establishments. The three-section tag may be placed with pins on the right ear. One tag is then removed and pinned to the head and the second tag is torn from the attached tag and placed on the carcass. An alternate method is to identify the hide by applying a tag to it by the use of back tag cement instead of fastening the tag to the right ear by means of a metal deadlock fastener. This method eliminates the danger of the metal fastener interfering with hide processing. ANH will furnish the backtag cement.

322.5 The bovine tuberculosis eradication campaign has been successful in reducing the incidence of this disease to a low level throughout the United States. In order to carry through with effective follow-up control measures, it is necessary to make use of a system that will locate the remaining few centers of infection. When these are located, disease control officials can concentrate their efforts in the areas where correction is needed. This effects a maximum of results with a minimum expenditure of time and money. The key point in this system is at the slaughtering plant where animals affected with tuberculosis can be identified and thus lead the investigators to the infected premises.

322.6 Each veterinarian should carefully study ARS-22-27, Special Report, "Mucosal Disease Complex" furnished him by ARS. Veterinarians and meat inspectors who perform ante-mortem and post-mortem inspection duties should be completely familiar with the symptoms of the disease conditions in this complex. This can be best accomplished through discussions by those concerned.

If any of the conditions of mucosal disease complex are observed, an immediate collect telephone report should be made to the veterinarian in charge, ANH Division, of the State where the animal originated. If the origin cannot be determined, then the veterinarian in charge of the State where the animal is being slaughtered should be notified. The telephone report should be confirmed by a report in writing on Form ANH-2-11C with a copy to the State livestock sanitary official and a copy to the Livestock Slaughter Inspection Division

All cases of hog cholera-like symptoms or lesions in swine diagnosed by Meat Inspection personnel shall be promptly reported by collect telephone, to the Animal Health Division Veterinarian in Charge in the State in which such case or cases are diagnosed. The telephone report should convey as much explicit information as is possible to enable the Animal Health Division to carry out all investigative procedures necessary in locating the source of infection.

Time expended in the assembling of trace-back information and in the transmission of the report should be billed against the Animal Health Division on Form C&MS-488. The service should be identified as "Hog Cholera Detection" on C&MS-488. Basically these billing instructions are the same as those outlined in Paragraph 311.7(E).

The Animal Health Division is extremely anxious to have meat inspection veterinarians report to them immediately any unusual conditions suggestive of a communicable animal disease whether found on ante-mortem or post-mortem inspection. Where such a condition is found, a collect telegram should be sent to



the veterinarian in charge of the Animal Health Division activities in the State where the animal originated.

The Animal Health Division furnished information pertaining to the Market Cattle Testing Program which was distributed to each station. Meat Inspection personnel should endeavor to support this program in every way possible in order to effectively assist the ANH Division in this area. Additional material or information on this subject can be secured from the Washington office or the ANH veterinarian in charge of the State.

### 322.7

A. The Meat Grading Branch, Livestock Division, Consumer and Marketing Service, of the Department makes acceptance examinations of meats and meat food products for procurement agencies. When the product is prepared in a federally inspected establishment and the specifications require special supervision, the local Meat Grading Service representative will ask for our constant supervision during certain portions of the processing. Most requests for constant supervision cover only the formulation of meat food products, and other processing phases used receive the usual supervision from a meat inspection standpoint.

Our personnel will maintain control of the identity of these products from the time they assume the responsibility for this specification compliance through all subsequent operations and until such time as the Grader is prepared to make the final acceptance.

When our cooperation is desired, our personnel will be informed by the local Grading people, who will give the official number and name of the establishment involved, furnish a copy of the applicable specifications and indicate the processing operations for which we are to be responsible.

The Grader will notify the inspector in time so that the latter may be prepared to assume his part of the work. When our inspector turns the product over to the Meat Grader, he will present to the Grader for his signature, four signed copies of Form MI-416 containing the following information:

1. Name of agency for which product is being processed.
2. Name and item number of product being certified.
3. A specific statement covering the phases of processing that are being certified.
4. Number of hours charged, designated as either basic or overtime or both, as the case may be. Time for laboratory examination should be shown separately. (Although the number of hours are shown, the hourly rate should not be put on the four forms. This time must be the same as the corresponding time on Form C&MS-488.)



The completed forms should be distributed as follows: The original copy should be used to support the billing and attached to C&MS-488 that is sent to the Finance Division, Administrative Fiscal Branch, Hyattsville, Maryland. Two copies should be given to the Grader. The fourth copy should be sent to the Meat Inspection Office, Chicago, Illinois. The fifth copy is the station record.

On C&MS-488 under "Remarks" should be a statement which will connect it with Form MI-416 in the event the two become separated. The statement would show the number of the establishment where the product was prepared and in addition some identifying notation such as "Pennsylvania State Contract." C&MS-488 should show that the billing is to be made against the Meat Grading Branch.

B. The Meat Grading Branch, Livestock Division, Consumer and Marketing Service, has available a Product Examination Service on fresh and frozen meat for use by the industry. It is available to carriers and other interested persons desiring a certification on the physical characteristics of the product at the time of examination only. Occasionally this determination may involve a question of wholesomeness. In these cases the Meat Grading Branch may call on the Meat Inspection Program personnel for assistance. Officers in Charge are authorized to respond to this request provided the product can be identified as "U.S. Inspected and Passed" product. Charges for the time of the inspector will be made in the same manner as for specification examination work.

C. A voluntary service has been developed by the Meat Grading Branch available to producers who desire to have carcass grades and/or other factors of cattle certified. The Meat Inspection Program has agreed to perform this identification at time of slaughter for which reimbursement will be made on a per head basis.

Identification procedure. Federal meat graders may request Officers in Charge to provide service in federally inspected plants for maintaining identity of slaughtered animals and for corresponding carcasses.

A back tag for identifying each live animal will be issued to the applicant or his representative (livestock owner or broker) by a member of the Meat Grading Branch. The applicant or his representative will be responsible for placing the back tag on each animal he desires to have graded and for identifying the cattle for the grader at the slaughter's livestock holding pens. The Meat Inspection Program has recommended that the paper back tag be placed on the animals in a similar manner to the market cattle identification procedure. The paper back tag should be located on the foreshoulder of each animal to be identified. To reduce the risk of losing back tags, identification by the applicant or his representative should be done no earlier than one day prior to slaughter of the animal.

The back tag numbers of all animals will be listed on a form prepared by the grader in triplicate identified as the live cattle list. The producer's name and address and the number of cattle involved are to be entered on the form. Prior to slaughter of the animal, one copy of the form will be given to the Meat Inspection Program inspector responsible for the slaughter department,

together with sufficient number of USDA wire seals and metal carcass tags, which must bear numbers corresponding to the numbers on the back tags placed on the live cattle. The instrument for applying the tags will be provided by the Grading Branch.

At federally inspected establishments, the veterinary supervisor or his assistant will attach the appropriately numbered metal carcass tag to each carcass. The tag will be attached to the carcass with the USDA wire seal before the hide is removed and after comparing the wire tag seal number with the back tag number to verify they are duplicate numbers. It will remain on the carcass until the grader has made final positive identification of the carcass and has obtained the grade and other desired information. It is recommended that the metal tag be placed on the leading half of the carcass. The veterinary supervisor responsible for the slaughter department will issue certificates to the grader certifying that the metal carcass tag number placed on each carcass corresponds to the back tag number of each live animal in the lot. In the event that animals are missed on the slaughter floor or the tag is missing from the animal when it arrives on the slaughter floor, it should be indicated on the certificate. The meat grader will furnish certification forms to the veterinary supervisor in duplicate. The following statement will appear on the form and be completed as follows:

I, (Name of Inspector), certify that I attached USDA metal carcass tags numbered \_\_\_\_\_ through \_\_\_\_\_ with USDA wire seals to carcasses which bore on the hides prior to skinning paper USDA back tags bearing corresponding numbers and that the number I placed on each individual carcass matched the number of its tag.

It will not be necessary to make a billing for this service. The Meat Grading Branch will record the number of cattle identified from the inspector's certification form and reimburse the Meat Inspection Program for the number of animals identified at the rate agreed upon by both Programs. This will be done at the Washington office.

322.8 The broker, commission agent, packer, or other responsible person concerned with importation has the responsibility to notify the Officer in Charge when Canadian cattle are received at an official establishment and to identify the cattle to the inspector concerned. After the imported cattle have been slaughtered, notification to that effect should be sent to the Animal Health Division Inspector in Charge at the border point of entry on Form ANH-17-33, "Animals Imported for Immediate Slaughter." It is not expected that this coverage will be extended to plants not operating under Federal Meat Inspection. A space is provided on Form ANH-17-33 for indicating tuberculosis lesions found in such animals. When tuberculosis lesions are found in cattle from Canada, one copy of Form ANH-6-35 should be prepared and forwarded to the Washington office of the Animal Health Division. The form should carry a statement such as "Origin of Animal Canada."



322.9

A. Meat inspection personnel will supervise the cleaning of trucks and trailers containing animals affected with an infectious disease when received at federally inspected packing plants.

In order to obtain approval for handling reactors, packing plants must provide adequate facilities and services for the cleaning and disinfection of vehicles transporting brucellosis reactor cattle with a permitted disinfectant as provided by Federal and State regulations.

Information about methods to be used in cleaning and disinfecting vehicles is given in Part 71, Subchapter C, Chapter I, Title 9 of the Code of Federal Regulations.

The following procedure should be used in cleaning trucks and trailers:

Once the plant employee has been properly instructed as to the procedure to follow in cleaning and disinfecting trucks, it will not be necessary for the inspector to personally supervise the disinfection of each and every truck. When the inspector is satisfied that the plant employee can be depended upon to do a good job, supervision by the inspector may be limited to personally observing the work at irregular intervals during the day. The inspector should be particularly interested at the time he is observing the work that

1. The trucks have been properly cleaned prior to the application of the disinfectant.
2. The spraying outfit is of sufficient size and is working satisfactorily.
3. There is an ample supply of a permitted disinfectant on hand.
4. The mixture of the disinfectant is of proper strength.
5. The entire interior surface, including the inner surfaces of the truck doors, is saturated with a permitted disinfectant.

It is not necessary to forward Forms ANH-3-62 or ANH-3-62-A covering the disinfection of trucks to the Washington office of the Animal Health Division. A memorandum to the Washington office of the Animal Health Division at the end of each month giving the total number of trucks disinfected during the month will be sufficient. However, the plant employee should keep a record by truck license number of each truck cleaned and disinfected. No placard ANH-2-62-C need be applied to trucks unless requested by the owner or driver of the truck.

Billing for this service should be made against the Animal Health Division on Form C&MS-488 and should include the supervision time, time involved in preparing forms and attaching placards, as well as cost of telephone calls.



B. Meat Inspection personnel will supervise proper handling of railroad cars containing animals affected with an infectious disease received at federally inspected packing plants at locations where Animal Health employees are not stationed.

Information about methods to be used in cleaning and disinfecting the cars is given in Part 71, Subchapter C, Chapter I, Title 9 of the Code of Federal Regulations.

The procedures outlined below should be followed:

1. As soon as it is ascertained that an infectious car has been received, a placard ANH-3-62-B should be securely attached to each side of the car. Notice should be given promptly over the telephone to the responsible railroad official and confirmed in writing on Form ANH-3-62-H.
2. Where possible, arrangements should be made to supervise the disinfection of all infectious cars received. Form ANH-3-62-C should be attached to the car only when disinfection has been personally supervised. Both sides of this form should be filled in, using weatherproof pencil, and a card attached to each side of the railroad car. Form ANH-3-62-B should be removed at the time Form ANH-3-62-C is attached.
3. Form ANH-3-62, Report of Infectious Cars Received, should be submitted to the Washington office of the Animal Health Division the day the car is received.
4. Form ANH-3-62-A, Report of the Disinfection of Infectious Car, should be submitted to the Washington office of the Animal Health Division the day the supervision of this work is accomplished.
5. Form ANH-3-62-D, Report of Delinquent Infectious Cars, should be submitted to the Washington office of the Animal Health Division on the 1st and 16th of each month, giving a list of all infectious cars reported on Form ANH-3-62 and not reported on Form ANH-3-62-A. No car should be included unless it was received 15 days or more prior to date of rendering Form ANH-3-62-D. A separate report should be rendered for each railroad company responsible for cars that are delinquent. No Form ANH-3-62-D is required on the 1st and 16th of each month unless there is an infectious car to report.
6. Charge for our service should be billed against the Animal Health Division on Form C&MS-488. The charge should include the time required for making telephone calls, preparing forms, and attaching placards. Travel expenses, if any, should also be billed against the Animal Health Division.

C. The forms used in performing this work are listed below:

ANH-3-62, Report of Infectious Cars Received.

ANH-3-62-A, Report of Disinfection of Infectious Cars.

## Section 322.9(C)

ANH-3-62-B Placard, "Clean, Wash, and Disinfect This Car."

ANH-3-62-C Placard, "This Car Has Been Cleaned, Washed and Disinfected."

ANH-3-62-D, "Report of Delinquent Infectious Cars."

ANH-3-62-H, "Notice of Infectious Cars to be Cleaned and Disinfected."

322.10 Market Cattle Testing Program. Formal arrangements have been completed whereby the Meat Inspection Program will assume full responsibility for collecting blood samples for the Animal Health Division on a reimbursable basis from all properly identified cattle at packing plants under Federal inspection. Inspectors performing sample collections will record the number of samples collected on C&MS-488 in the "Other-Specify" column under the day collected.

Under "Other-Specify" the words "Samples Collected" and an asterisk should be inserted. B, O, and H should be marked out. An asterisk and the words, "Market Cattle Testing Program" should be inserted under "Remarks."

The completed C&MS-488 should be forwarded to the Finance Division, Administrative Fiscal Branch, Hyattsville, Maryland, where it will be used as the basis for billing the Animal Health Division. For the most part, this sampling will pertain to mature cows bearing the official back tag but some exceptions may be made to this at a later date.

While you are no doubt familiar with most of the following, we are outlining the conditions under which Market Cattle Testing blood samples are to be collected and handled.

A. Cows to be sampled. Blood samples are to be taken from mature Market Cattle Testing back tagged cows as previously mentioned. Mature cows are defined as being three years of age or over and those less than three years of age which are parturient or post-parturient. Arrangements may also be made by the Animal Health Division to identify specific animals or lots by brands, ear tags, or by consignment papers. Blood samples would also be taken from these animals.

B. Collecting and handling the blood samples. Blood samples may be taken from the bleeding operation, the brachial plexus, the heart, or in any other way which will provide a good quality blood sample. About a half to three-fourths tube of blood provides the right amount for satisfactory laboratory handling.

C. Identifying the blood sample tube. This may be done by either removing the back tag and wrapping it around the tube or by recording the identification information on a record form. Every effort should be made to use methods for maintaining identification of the animal until inspection has been completed so that successful trace backs may be made when lesions of tuberculosis or other disease conditions are found by post-mortem examination.



D. Handling and mailing the blood samples. Every precaution must be taken to avoid introducing moisture or contamination into the sample. The perishable nature of the blood sample must be fully recognized and refrigeration (35-40 degrees F.) must always be used for the blood samples after the serum has separated. When possible, blood samples should be mailed at the end of each day or at least every other day unless local arrangements are made for picking up the blood samples. Franked labels addressed to the proper laboratory will be provided for your use.

E. Maintaining supplies such as blood sample tubes, mailing boxes, franked labels, record forms, racks, etc. The Animal Health Division in your State will arrange for supplying these needs at each of the plants that are collecting Market Cattle Testing blood samples.

F. General provisions for program operation:

1. Arrangements at individual plants. It seems likely that Market Cattle Testing blood samples are now being collected at practically all federally inspected plants. Where this is not being done, local representatives of the Animal Health Division will make necessary arrangements with the packer to institute the program when the Animal Health Division feels it is necessary.

2. The Meat Inspection Program District Directors in each area will develop the necessary working arrangements with all of the plants in their region after the initial arrangements have been agreed to and by working closely with the Animal Health Division Directors in their respective areas.

In all of these arrangements, the Meat Inspection Program will act as an agent for the Animal Health Division in the collection of blood samples and related activities dealing with animal disease found on post-mortem inspection. It is expected that the Animal Health Division and the Meat Inspection Program will continue to cooperate closely in fully effecting these requirements. It is the intention of the Animal Health Division and the Livestock Slaughter Inspection Division to arrange for the collection of blood samples by Meat Inspection Program personnel at all plants under Federal inspection. This is to be done by mutual effort and planning between the Livestock Slaughter Inspection Division and the Animal Health Division as outlined herein.

322.11 The Meat Inspection Program will furnish assistance whenever requested by the Fruit and Vegetable Division in drawing official samples of processed fruits and vegetables at locations where personnel of that Division are not regularly assigned but where meat inspectors are working. Field officials of the Fruit and Vegetable Division will supply the necessary instructions at the time the request for drawing samples is made.

A charge for the time should be made on Form C&MS-488 in the regular manner showing under "Remarks" the type of service given and the name of the Branch of the Fruit and Vegetable Division that requested sampling.



322.12 Some stations have supervision over plants where both poultry and meat inspection are in effect may not have all printed material needed in order to do an effective job when performing poultry inspection. Several sets of such material have been obtained from the Poultry Division, Consumer and Marketing Service, and one set furnished each of the District Directors. Each set consists of a 24-page pamphlet entitled "Regulations Governing the Inspection of Poultry and Poultry Products." This is a reprint of Subchapter D, Chapter I, Title 7, of the Code of Federal Regulations. The effective date shown thereon is June 1, 1960. Poultry Inspector's Handbook. This is a loose-leaf 8x10 1/2 handbook of nearly 100 pages which deals only with the mandatory poultry inspection program. The material therein is numbered to correspond with the numbering of the Regulations. The handbook has been revised as of June 1967.

All of this material should be available at stations having meat inspectors who also perform poultry inspection, usually at plants where both poultry and meat inspection are in effect.

322.13 At establishments where a poultry inspector performs work on an overtime or holiday basis for the Meat Inspection Program, the poultry inspector should prepare Form C&MS-488 and reflect the hours in the column titled "Packer Overtime Act." The service should, of course, be charged against the establishment at which the work was performed.

The poultry inspector should at the close of each biweekly pay period mail the original and one copy of C&MS-488 to the Finance Division, Administrative Fiscal Branch, Hyattsville, Maryland, one copy to the Meat Inspection Administrative Staff, Consumer and Marketing Service, Washington, D. C. 20250. and the fourth copy should be retained in his files at the establishment.

322.14 Inspection of Food Suppliers for Interstate Carriers by U. S. Public Health Service. The interstate quarantine regulations of the U. S. Public Health Service provide for inspection of food sources supplying interstate carriers. Occasionally, this inspection will involve the review of establishments operating under Federal meat inspection. Inspectors will cooperate in any such survey at the request of the Public Health Service. If deficiencies are noted during this survey which come within your jurisdiction and responsibility, you should take prompt action to correct these deficiencies through the use of your authority over facilities, procedures and product in the official establishment.

You should not join with the inspection agency, however, in any critical report which might indicate the establishment is operating improperly. If conditions are found needing correction of a kind over which you have responsibility appropriate action should be taken. Continued violations of our regulations could be cause for a recommendation from you for the withdrawal of inspection. This would be expected only if you have exhausted your ability to obtain corrective action.

322.15 The Meat Grading Branch, Livestock Division, provides grading services at nonfederally inspected slaughtering and/or processing establishments only when they have been surveyed by an Officer in Charge and it is determined such plants (initially and throughout the desired period of use) are operating in compliance with the inspection and sanitation requirements of the Consumer and Marketing Service, Meat Grading Branch, as contained in SRA-C&MS 98 Section 53.6 with augmentation in pamphlet C&MS 322.

A. Request for Federal Meat Grading Service. Two forms are supplied to the applicant by the Meat Grading Branch:

1. Form LS-313, Application for Meat Grading or Acceptance Service (for use of Meat Grading Branch only).

2. Form LS-302, Report of Preliminary Investigation by Veterinarian, is executed by the local inspection system and is forwarded to the Livestock Slaughter Inspection Division by the Meat Grading Branch.

B. Action by Livestock Slaughter Inspection Division.

1. Reviews applicable laws, ordinances and regulations to determine conformity with C&MS requirements.

2. Reviews Forms LS-302 for completeness.

a. If it appears the establishment may be operating in compliance with C&MS Meat Grading Branch requirements, the Officer in Charge will be authorized to conduct an initial in-plant survey.

b. If Forms LS-302 show items of noncompliance, the establishment will be notified and the survey authorization deferred pending corrective action.

C. Action by Meat Inspection Program. On receipt of authorization a copy of Form LS-302 and applicable correspondence from the Livestock Slaughter Inspection Division, the Officer in Charge will perform an in-plant survey to determine if the establishment is operating in compliance with C&MS requirements.

1. Initial Surveys. On arrival at the establishment, the Officer in Charge should introduce himself to the management. Management and a responsible official of the local meat inspection system should be invited to accompany him on the survey. If an establishment representative and/or agent of the local inspection system are not available, the survey should be conducted in their absence. On completion of the survey, before leaving the establishment or the area, company management and local meat inspection officials should be furnished an oral summary of survey findings.



2. Compliance Status.

a. If plant is in compliance on an initial survey. On determining if the establishment is operating in compliance, the Officer in Charge will submit a written report containing his recommendation to the Livestock Slaughter Inspection Division specifying the operations for which the plant is to be recognized. The completed LS-302 should be given to the establishment. For purposes of expediency in securing grading service, the plant may wish to have favorable survey findings telephoned to the Livestock Slaughter Inspection Division. This may be done at company expense; however, such action must be followed by a written report.

b. If plant is NOT in compliance - on an initial survey. The Officer in Charge will submit a written report of his findings to the Livestock Slaughter Inspection Division (return the completed LS-302 with this letter). The report should detail all deficiencies under the following headings:

- (1) Ante-mortem and/or post-mortem inspection.
- (2) Sanitation.
- (3) Operations.
- (4) Facilities.

The report should include other pertinent information and/or conversation with management or inspectors.

3. Informal Visits to Local Meat Inspection System. The Officer in Charge may visit the office of the local inspection system to discuss progress being made in correcting previous survey deficiencies; however, he should not resurvey an establishment until authorized to do so by the Livestock Slaughter Inspection Division.

4. Request for Resurvey. When management of an establishment which was not recognized on an initial survey determines their operations have been brought into compliance with C&MS Meat Grading Branch requirements, they should inform the Livestock Slaughter Inspection Division in writing that:

- a. The deficiencies observed on previous survey have been corrected.
- b. A resurvey is requested.
- c. They agree to reimburse the Meat Inspection Program for all costs of the resurvey.



The company's letter must be accompanied by a letter of concurrence from a responsible official of the local meat inspection system. This should include an enumeration of corrective actions that have been made.

5. Resurvey Procedure. Authority to conduct a resurvey will be given the Officer in Charge by the Livestock Slaughter Inspection Division. A resurvey will be conducted in the same general manner as an initial survey with special attention given to previously observed deficiencies.

6. Report of Resurvey. The procedure outlined in C 2 a or C 2 b shall be followed.

7. Recognition of Compliance. After reviewing the initial survey or resurvey report, the Livestock Slaughter Inspection Division will inform the applicant by letter that his establishment is recognized to be in compliance with Consumer and Marketing Service, Meat Grading Branch, inspection and sanitation requirements. A copy of this letter will be sent to the Washington office of the Meat Grading Branch. The actual granting and initiation of grading service to a NFI establishment is the responsibility of the Meat Grading Branch.

8. Periodic Routine Surveys of Recognized Establishments. Form LS-4, "Plant Survey Report" is used for reporting these surveys. The form should be completed before leaving the establishment and copies distributed as follows:

- a. Original to establishment.
- b. Green copy to local inspection system.
- c. Green copy to local inspection system (if necessary).
- d. Yellow copy to Livestock Slaughter Inspection Division (showing copy distribution).
- e. Pink copy retained by Officer in Charge.

Deficiencies observed should be fully discussed with the establishment representative and responsible local inspection personnel, both of whom should be urged, in the interest of retaining recognized status of the establishment, to effect prompt correction.

9. Noncompliance in Recognized Establishments.

- a. If on a routine survey the Officer in Charge observed slaughtering operations being conducted in the absence of an official inspector he shall:

- (1) Complete his survey.

(2) Orally apprise the plant management and a responsible local inspection official of the noncompliance with C&MS Meat Grading Branch requirements and probable loss of recognition.

(3) Using other than plant phone, immediately notify the Livestock Slaughter Inspection Division.

(4) Submit detailed report, via airmail, concerning the absence of the inspector and other deficiencies observed. This report should be prepared in a manner similar to C 2 b.

(5) The Livestock Slaughter Inspection Division will:

(a) Immediately inform the establishment by wire that it is no longer recognized as being in compliance with the minimum inspection and sanitation requirements specified in SRA-C&MS 98. A copy will be sent to the Washington Meat Grading Branch office.

(b) After receipt of the written report and the official notice of withdrawal of grading service, write the plant detailing defects and deficiencies which led to loss of recognition and withdrawal of grading service. In addition, the letter will explain procedures for reinstatement of compliance recognition by the Meat Inspection Program.

b. If after previous fair warning, in those plants where facilities, sanitation and inspection procedures are not in compliance, the Officer in Charge shall:

(1) Orally inform the plant management and responsible local inspection personnel of his observations and the possible loss of establishment recognition through failure to meet C&MS requirements.

(2) Using other than plant phone, immediately notify the Livestock Slaughter Inspection Division.

(3) Submit a detailed written report of all deficiencies to the Livestock Slaughter Inspection Division via airmail. This report should be prepared in a manner similar to C 2 b.

(4) The Livestock Slaughter Inspection Division will:

(a) Upon receipt of the report and determination of nonconformity immediately wire the establishment that it is no longer recognized as being in compliance with the minimum inspection and sanitation requirements specified in SRA-C&MS 98. A copy will be sent to the Washington Meat Grading Branch office.

(b) Upon receipt of the official notice of withdrawal of grading service, write the plant detailing the defects and deficiencies which led to loss of recognition and withdrawal of grading service. In addition, the letter will explain procedure for reinstatement of compliance recognition by the Meat Inspection Program.

c. The Livestock Slaughter Inspection Division will notify the Officer in Charge when a resurvey is to be performed.

d. Without exception, it is the responsibility of the Meat Grading Branch to actually withdraw grading service from or reinstate it to a nonfederally inspected establishment.

10. Reinstatement Resurvey. Follow applicable procedures in C 5 and 6.

11. Charges. Charges for surveys will be as prescribed in SRA-C&MS 98 and as shown in samples of C&MS Form 488 and LS Instruction 915 (MG)-3 (Rev. 2).

322.16 All special surveys requiring charges as specified in SRA-C&MS 98, Section 53.29 (e) shall be billed on Form C&MS 488.

It is imperative that we have a fair and realistic estimate of charges for our services. Therefore, it is necessary that the travel (includes mileage and per diem) and salary be prorated between Meat Inspection and Meat Grading activities. Travel costs should be prorated on the basis of the actual purpose of the trip. Salary costs should prorate the basic eight-hour day in accordance with the actual hours spent in reviewing activities. For example, if an Officer in Charge travels from Los Angeles, California, to Bakersfield, California, to visit one federally inspected and one nonfederally inspected plant (purpose 50% - 50%) spending two hours in each plant (actual hours worked 50% - 50%) the cost would be prorated 50 - 50 on both travel and salary.

A chart which shows hypothetical examples of how the time and travel should be prorated is on the reverse side.

Only actual cost of the travel and the salary for nonfederal plants should be furnished as separate items on the reverse side of each LS-4 (yellow copy) which is submitted to the Livestock Slaughter Inspection Division; i.e.

Travel \$ \_\_\_\_\_. Salary \$ \_\_\_\_\_.



## PRORATION OF TRAVEL AND SALARY IN REVIEWING NONFEDERALLY INSPECTED ESTABLISHMENTS

<u>From</u>	<u>Purpose of Trip</u>	Hours Worked				Charges			
		<u>FI</u>		<u>NFI</u>		<u>Travel</u>		<u>Salary-Hours</u>	
		<u>FI</u>	<u>NFI</u>	<u>FI</u>	<u>NFI</u>	<u>FI</u>	<u>NFI</u>	<u>FI</u>	<u>NFI</u>
Official station	1 FI Plant	6				100%		8	
Official station	1 NFI Plant		5				100%		8
Official station	1 FI Plant & 1 NFI Plant	3	1			50%	50%	6	2
Official station	3 FI Plants & 1 NFI Plant	6	2			75%	25%	6	2
Official station	1 FI Plant & 6 NFI Plants	8	8			1/7	6/7	8	8
Official station	1 NFI Plant (Had time to make short review of FI Plant)	1	7				100%	1	7

Key

FI Federally Inspected  
NFI Nonfederally Inspected

NOTE: If GSA automobile is used and the purpose of the trip is 100% for review of NFI plant or plants, the entire cost for use of GSA automobile will be charged to the plant or prorated to those reviewed if more than one. Only those travel expenses would be included that is claimed on a Travel Voucher. Fractions of hours should be rounded out to the nearest hour.

If more than one NFI plant is to share the estimated cost, the proportionate charges for each plant shall be shown on the respective IS-4 yellow copy.

PART 323 - BRIBERY, COUNTERFEITING, ETC.

323.1 It is essential that each employee be aware of the standard of conduct expected. To accomplish this, each Officer in Charge and Chemist in Charge should take specific action in this area by discussing the conduct requirements outlined in C&MS Instructions 363-1, 365-1, 365-3 and 366-1 with each employee at his Circuit. At large Circuits this may be delegated to Subcircuit supervisors. During such discussions, emphasis should be placed on two types of prohibited conduct which are of special importance in the performance of the responsibilities assigned to this Program. These relate to the acceptance of gratuities in any form from inspected packers or others whom we service and the willful falsification of official records including time and attendance reports. It should be further emphasized that misconduct in these two areas normally results in a recommendation for the removal of the employee involved.

These discussions should take place annually at the time of the performance rating interviews. Your Circuit files should contain a record signed or initialed by the employee indicating when these discussions took place. In addition to recording the annual discussion, it is essential that each new employee be informed during the orientation period of these requirements and the record completed in the same manner.

323.2 All cases of attempted bribery of Meat Inspection Program employees should be reported immediately to the nearest FBI field office or agent. In no case should more than one hour elapse from the time of the event until the case is properly reported.

Successful investigation and resultant prosecution is often dependent on immediate referral of such cases in order that leads can be covered and necessary evidence preserved. Employees should avoid making a commitment to the individual offering the bribe and follow advice of the investigative agents.

At appropriate times, Officers in Charge should discuss the matter with their employees and decide as to who will actually make the FBI contact.

The address as well as the telephone number of the FBI field office or agent is found in that part of the telephone directory concerning the United States Government. This information should be kept readily available. If there is none listed in the local telephone directory, contact should be made with the local police for the address and telephone number of the nearest FBI office or agent of the FBI.

Employees should report all such cases to their Officer in Charge who, in turn, will report to the Washington office and the appropriate District Director. The Washington office will advise the Office of Personnel through the Personnel Division of C&MS of the incident and the action taken.

## PART 324 - EXPORT STAMPS AND CERTIFICATES

324.1

A. A procedure for the inventory and control of export certificates and stamps will be placed in effect at all Circuits. The accounting system should reconcile all certificates and stamps received with those that have been issued or voided and those remaining on hand. Certificates and stamps and pertinent inventory records must be maintained under official lock or seal.

The responsible inspector at each establishment must maintain a record of all export stamps and certificates received and issued to applicants. The record should include all pertinent information concerning the export shipment. This record at the establishment level should be reconciled as necessary with the station inventory to assure adequate inventory control.

B. A good adhesive suitable for the purpose intended should be used to affix export stamps securely to containers. Some adhesives suitable on wooden boxes may not be satisfactory on metal containers. Also, the handling that the articles are to receive, such as freezing, will determine the kind of adhesive to use. It has been found desirable to apply a thin covering of adhesive over the export stamp as an added protection.

324.2 When U. S. Inspected and Passed product is processed in other than an official establishment, it loses its identity as such and is no longer considered inspected and passed product. It is therefore not eligible for export certification as such.

324.3 Careful examination and inspection must be given to products for which export certificates are requested. The extent of reinspection of inspected and passed product depends on the type of product or container thereof and the size of the order. In some cases, sample inspection is sufficient while in others 100 percent inspection might be necessary. The inspector must make such inspections as will assure him of the facts upon which he makes the export certification. Frozen product may be inspected by defrosting boxes of product or by removing center slices of the product for defrosting and examination.

324.4 The inspector should sign the original of the export certificate in ink. The inspector is to prepare the certificate. He may allow the establishment to type the certificate if he personally supervises the typing.

324.5 The packing of inspected and passed product in cartons or containers for export at places other than official establishments should be done under the Identification Service.

324.6 The foreign destination should be shown on the export certificate.



324.7

A. It is not necessary to furnish more copies of official export meat inspection certificates than is provided for in the Regulations. Exporters requesting additional copies may make photostats of the completed certificates furnished to them.

B. Restrictive statements such as "Lymph Nodes on" and "Lard, Current Production," should not be added to the name of the product on the regular export meat inspection certificate unless they are provided for in the Meat Inspection Regulations, Manual of Meat Inspection Procedures, or have been previously authorized by the Processed Meat Inspection Division. Such statements should not appear on the certificate simply because the packer or exporter included it on his export certificate request, Form MI-412. Requests for all additional certifications not authorized in this part of the manual are to be referred to the Processed Meat Inspection Division.

324.8 Officers in Charge are authorized to comply with requests received from time to time to inspect and certify for export product previously inspected and passed and so marked which is located elsewhere than in an official establishment. This may be done whether the product is located within reasonable limits of the official Circuit, Subcircuit, or at a place so situated geographically that the export certification would logically be handled by the Circuit receiving the request. In the latter case, the availability of an inspector must necessarily be considered. For example, if the meat inspection work at the small Circuit is such as to require constant attention of the inspector or inspectors there assigned to a degree that the request cannot be complied with, then the person making the request should be so informed and asked to submit his request to the Officer in Charge of a larger Circuit where an inspector would be available, or to the Processed Meat Inspection Division. An Officer in Charge may transmit such a request with his comments to the Processed Meat Inspection Division if he believes such action is warranted. The party requesting the service is to reimburse the meat inspection appropriation for the expenses of travel and subsistence that an inspector incurs while away from his official station, but no charge shall be made against the person or firm requesting the service for the time of the inspector. Also the party requesting the service is to reimburse the meat inspection appropriation for inspection given during any overtime period.

324.9 Certification of inedible material that is to be exported, such as fertilizer, dried blood, bonemeal, and the like, that includes a description of the method of processing and handling, the temperature to which the article has been heated, and the length of time maintained, can be performed under the Certification Service for Inedible Animal Byproducts administered by the Animal Health Division. (See ANH Division Memorandum 592.1, February 14, 1966)

When this material is prepared or handled in an establishment at which our inspection is maintained, the Animal Health Division has asked us to act for them. For this purpose, a letterhead type of certificate should be used. This should show that the certification is by the Animal Health Division with

the Officer in Charge acting for it.

The Washington Staff of the Animal Health Division will deal directly with Officers in Charge about this problem and furnish instructions to carry out the functions.

Charges for the service should be billed against the Animal Health Division and should include the time needed to complete the transaction, including the time of the inspector supervising the processing or preparation of product and time of anyone making out and handling the certificates. A minimum charge of 15 minutes should be made for each separate billing transaction, which means each time a certificate is issued. If supervision of a particular item covers more than one day, the charge may be made on the last day.

324.10 It is the responsibility of exporters to determine the requirements of a foreign country. The following requirements have been brought to the attention of the Processed Meat Inspection Division and are reproduced for the information of exporters and Meat Inspection personnel.

A. The official meat inspection seal, United States Department of Agriculture, will be used on MI-412-8 and MI-412-9.

B. Blue animal casing certificate (MI-415-4) may be issued to any country on request of exporters.

C. Numbered inedible product stamps, MI-415-6, and inedible product certificates, MI-415-3, may be issued upon request of the shipper for export shipments of casings, bladders, hoofs, horns, grease, and similar animal products.

D. Certifications and statements marked \* will be made only at the request of the establishment or exporter. Charges will be made against the applicant for all additional time needed to develop the facts or supervise the product under the Certification Service (Part 340, Meat Inspection Regulations), or the Certification Service for inedible animal byproducts administered by the Animal Health Division (Part 324.9, Manual of Meat Inspection Procedures).

#### 324.11 ALGERIA

##### A. Meat Products

1. Issue MI Form 412-11.

##### B. Casings

1. Form MI 412-11 may be issued.

#### 324.12 ARGENTINA

Section 324.12(A)

A. Meat Products

1. Export certificate shall be visaed by consul of that country.

324.13 AUSTRALIA

A. Meat Products

1. Fresh and frozen meat and meat products are not eligible for exportation to Australia at this time due to the existence of hog cholera in this country.

2. Cooked meats and cooked meat products contained in hermetically-sealed cans may be exported accompanied by the following certification signed by an authorized government veterinarian:

a. The goods were derived from animals slaughtered for human consumption in the United States.

b. The animals from which the goods were derived were subjected to ante-mortem and post-mortem veterinary inspection at the time of slaughter and were free from contagious and infectious disease.

c. The goods were not exposed to infection prior to exportation.

3. In addition, the following declaration by the manufacturer is required:

a. In the course of manufacture, every portion of the contents of the cans or tins has been heated to a temperature of not less than 100°C. (212°F.).

b. The temperature of the heat used for that purpose and the length of time for which it was used has been endorsed by a government veterinary officer in the United States with a certificate certifying that he is familiar with the process of manufacture of the goods and that he has no reason to doubt the truth of the declaration.

B. Casings

1. Issue Form MI-415-5.

C. Inedible

\*1. Cattle hides are not permitted entry from countries in which foot-and-mouth disease occurs. They must be accompanied by a certificate from a government veterinarian stating that the hides were derived from cattle slaughtered for human consumption.



324.14 AUSTRIA

## A. Meat Products

1. The following statement will be made either on the reverse of the regular export certificate or on Department letterhead stationery: "This is to certify that neither rinderpest, foot-and-mouth disease nor contagious pleuropneumonia existed in the United States during the twelve months preceding slaughter of the animals from which these products were derived."

## B. Casings

1. Issue Form MI-415-5.

324.15 BELGIUM

## A. Meat Products

1. Issue Form MI-412-8.

2. The Belgium meat import regulations apply to all meat including horse meat, and all processed and canned products containing more than 5 percent by weight of meat.

3. The following fresh or frozen products are eligible for entry:

- a. Beef -- bone-in or boneless pieces weighing at least 22 pounds.
- b. Veal -- bone-in pieces weighing at least 22 pounds.
- c. Pork -- bone-in hams, loins, and bacon from back and breast.
- d. Mutton, Lamb & Goat -- bone-in legs, shoulders and loins.
- e. Horse meat -- bone-in pieces weighing at least 22 pounds.
- f. Unboned heads of all species.
- g. Edible offal, such as hearts, kidneys, livers, tongues, brains, intestines, paunches, stomachs, bowels, pancreas and thymus. (Bowels, paunches, and stomachs must be scraped and scalded.)

4. Fresh meat, chilled or frozen, shall be marked with clearly legible brands. Each piece or cut shall be branded. Carcasses weighing less than 132 pounds shall have four brands on the shoulders and external surfaces

## Section 324.15(A4)

of the hind limbs. Pork carcasses shall also be branded on the ribs. Carcasses weighing more than 132 pounds shall have at least four brands on each side placed on the thigh, loin, back and shoulder.

5. Labels need not be submitted to the Belgian officials for approval but shall be approved in the usual manner by the Labels, Standards, and Packaging Branch, Technical Services Division. One label shall be affixed to the container and one label shall be placed inside the container. A label need not be placed inside the container if the cans or packages within the container all bear labels identical to the label affixed to the container. The label shall show:

- a. Kind of meat in the product,
- b. Official number of the plant processing or producing the product, and
- c. Country of origin.

### B. Casings

1. Containers may be marked with blue animal casing stamp (MI-415-7). Each exportation shall be covered by Form MI-412-8 with words "Animal Casing" substituted for the word "Products." The certificate must bear the serial numbers of the casings stamps used. Nodular casings shall be described on the certificate as "Nodular (not clear)."

## 324.16 CANADA

### A. Meat Products

1. Certificate (Form MI-412-3) should show the address of consignor for products exported to Canada.

2. Livers are required to have portal lymph glands intact. Sliced liver in consumer-size packages accepted without the portal gland. Beef livers without portal lymph glands, shipped at the exporter's risk, should bear the statement "Beef Livers (not certified for presence of portal lymph glands)" on the export certificate.

3. Meat trimmings too small to permit adequate inspection are not permitted.

4. Dressed carcasses from which the peritoneum, pleura, or body lymph glands have been removed are not permitted.

5. Artificially colored product prohibited.

6. Spleens, udders, mucous membranes, parotid salivary glands, and lungs are prohibited in meat food products.

7. Any descriptive terms applied to meat products and composition of meat products must be consistent with the Canadian Food and Drug Regulations and the Canadian Meat Inspection Regulations.

8. Foreign products originating in countries other than Argentina, Australia, Brazil, Denmark, France, Federal Republic of Germany, Republic of Ireland, Netherlands (Holland), New Zealand, Northern Ireland, Norway, Paraguay, Poland, Portugal, Scotland, Sweden, Switzerland, United States of America, Union of South Africa, and Uruguay are not permitted entry into Canada.

9. Bulk products such as fresh hams, bellies, etc., may only be shipped from official establishments in this country directly to registered establishments in Canada. If this is not the case, products of this nature must be placed in packages such as cartons or boxes bearing markings approved by the Canada Department of Agriculture. Each bulk piece must be legibly branded with the inspection legend of an official establishment. There must be at least three brands to each hog side. Skinned bacon bellies may be bundled and tagged. The tags should bear all the required labeling features including an inspection legend. The mandatory information for loose or bulk meat must appear on a placard 12" by 12" on the doors of railroad cars, trucks, or trailers and shall show the following:

a. The name and address of the packer or first dealer. The address shall include the abbreviation U.S.A. In the case of a first dealer or distributor, the name shall be preceded by the words "Packed for."

b. A true and correct description of the contents. The animal species must be shown as well as the cut or portion name.

c. The statement "Product of U.S.A." must appear immediately below the product description in a clear and legible manner which usually requires that it be in letters at least half the size of those used in the product name.

d. Net weight and the word "weight" must be spelled in full.

e. The official serially numbered Form MI-412-10 (Export Stamp) is to be attached. For approval purposes the domestic meat label is acceptable provided it is indicated that the official export stamp will be used on the actual shipment.

10. A similar placard is expected for beef quarters, skin-off calf carcasses and hog carcasses. However, in the case of skin-on calf carcasses, an approved individual carcass tag is required in lieu of external branding.

11. Meat inspected or identified under Part 340 of the Regulations is not eligible for entry into Canada according to their standards.



12. Boars are not eligible for entry. Inspectors are to make a reasonable effort to assure that pork from boars is not certified to Canada. This is particularly important in pork from establishments that slaughter a high percentage of boars.

B. Casings

1. Form MI-415-5 may be issued in duplicate.

2. Animal casings must have been slimed and stripped so that the mucous lining is completely removed by means other than fermentation. Markings must be approved by the Canadian Veterinary Director General.

C. Inedible

\*1. The following statement will be made on Form MI-415-3: "The material described on this form originated in an establishment operating under U. S. Federal inspection and was derived from animals that received ante-mortem and post-mortem inspection and were found to be free of disease at time of slaughter."

324.17 COLOMBIA

A. Meat Products

1. Certificate should be visaed by consul of that country at place of origin or first port.

2. Form MI-412-7 issued in five copies for lard destined to Colombia. The fifth copy is for the Circuit file.

324.18 CZECHOSLOVAKIA

A. Meat Products

1. The following certification, on the reverse of the regular export certificate or on Department letterhead stationery, may accompany lard:

a. Originates from hogs which were found to be healthy before, during, and after slaughter, and that the meat, including fat, is suitable for human consumption without any restrictions.

b. No antioxidants were used in producing the lard.

324.19 DOMINICAN REPUBLIC

A. Meat Products

1. Export certificate to be visaed by consul of that country at place of origin or first port.

324.20 ECUADOR

## A. Meat Products

1. Certificate to be visaed by consul.

324.21 FRANCE

## A. Fresh Meat Products

1. Form MI-412-11 is to be used to certify fresh meats and offal items for export. Packages of meat, meat food product or edible offal must be identified with duplicate labels, serially numbered. One label is to be applied to the outside of the container and the other to the interior of the package. The label must show the following details:

- a. A serial number.
- b. A description of the product including the species of animal from which derived.
- c. Net weight.
- d. Inspection legend. The inspection legend is to be the labeling legend illustrated in Section 317.2 of the Regulations.

2. Item 2 of the MI-412-11 "Address of the approved slaughter-house or houses" should show the establishment in which the product was last handled or packed, irrespective of the type of operations conducted by the establishment.

3. Pork and pork variety meats must not be derived from hogs coming from herds or farms under quarantine for hog cholera. A statement to this effect must appear on the MI-412-11 as follows:

Ces produits de porc ou d'abats de porc ne sont pas de provenance d'animaux eleves dans une zone en quarantaine pour peste porcine.

4. Pork and pork cuts may be certified for export if frozen for destruction of trichinae as follows:

- a. 30 days at  $-15^{\circ}$  C. ( $+5^{\circ}$ F.)
- b. 20 days at  $-23^{\circ}$  C. ( $-9.4^{\circ}$ F.)
- c. 12 days at  $-28^{\circ}$  C. ( $-18.4^{\circ}$ F.)

Bulk product may be stored, trichinae treated and packed for export to France in a cold storage plant operating under Identification Service. In these cases, the labels (interior and exterior) will bear an inspection legend with an establishment number in the 3000 series. The French Sanitary Certificate, Form MI-412-11, must show the name, address and establishment number of the producing establishment as well as the name, address and establishment number of the cold storage plant.

5. Cuts of meat, boneless or bone-in, weighing more than  $6\frac{1}{2}$  pounds must be branded.

6. When small cuts of less than  $6\frac{1}{2}$  pounds are wrapped or packaged, the wrapping or package should show the following:

- a. Name, location and license number (inspection legend) of preparing establishment.
- b. Species of animal and name of cut.
- c. Net weight.
- d. Date of packaging.

7. Individual packages or cuts of meat are to be in containers showing the following:

- a. Name, location and license number (inspection legend) of the preparing establishment.
- b. Species of animal and name of cut.
- c. Net weight.
- d. Date of packing or date of deboning.

#### B. Processed Meats

1. Form MI-412-12 is to be used to certify all processed meats, including edible fats, for export to France. The official meat inspection seal should be placed on the lower left portion of the certificate.

2. It is not necessary for packaged and labeled product certified with this form to have labels inserted in the shipping containers.

#### C. Casings

1. Form MI-412-12 is to be used with meat inspection seal impressions.



2. Casing may be certified from unofficial premises if the following conditions are met:

- a. The establishment preparing the casings is open at all times to Federal meat inspectors.
- b. Inspections are made periodically to insure that proper standards of hygiene are maintained.
- c. The casings are obtained from animals slaughtered under Federal meat inspection.
- d. The inspected plants from which the casings are obtained are recorded under Item 11 "Origin of the foods."

324.22 GERMANY (WEST GERMANY)

A. Meat Products

1. Issue Form MI-410-10 for fresh meats and edible organs.

2. Form MI-410-13 will accompany all shipments of beef and beef products certified for export to Germany. It will be issued in addition to the German Meat Inspection Certificates, Forms MI-410-10 or MI-410-11. Beef and beef variety meats derived from animals originating in modified certified areas and certified brucellosis-free areas will qualify under Section III (1) (d) of the Germany Animal Health Certificate. Establishments should contact Federal and/or State veterinary animal disease control officials regarding the feasibility of obtaining the brucellosis certification. Where necessary, identification of eligible livestock and products will be maintained. This will be supervised on a reimbursable basis under the Certification Service, Part 340 of the Meat Inspection Regulations.

3. It is no longer necessary to record dates of slaughter on Form MI-410-10 or dates of production on Form MI-410-11.

4. Chilled, skinned, veal carcasses weighing no more than 165 pounds may be shipped in halves or quarters without heads.

5. Fresh pork tongues and fresh beef tongues are not eligible for shipment.

6. Fresh pork fatbacks or pork bellies may be shipped in pieces weighing at least 7 pounds.

7. Products intended for export to Germany must be stored either in official premises or in warehouses operating under the Identification Service.

8. Packages of meat, meat food product or edible offal meat must be identified with duplicate labels, serially numbered. One label is to be applied to the outside of the container and the other inserted in the interior of the package. The label must show the following details:

- a. A serial number.
- b. A description of the product including the species of animal from which derived.
- c. Net weight.
- d. Inspection legend.

The packages must be moisture proof and fat proof and show no evidence of leakage.

9. Frozen cattle carcasses may be shipped in quarters without heads. Beef and veal carcasses are permitted entry either with or without kidneys and kidney fat. If kidneys and kidney fat are attached, the kidneys must be exposed. Quarters and halves of all species must be marked to identify whole carcasses.

10. Hog carcasses may be shipped in halves. The head must be split and left attached. The sides must be marked to identify whole carcasses. The tonsils, eyeballs and eardrums must be removed. (Note: We cannot at present provide the animal health certificate for hog brucellosis required for importation of pork into Germany.)

11. Beef and sheep livers. The bile duct will be opened by the normal method. In addition, a transverse incision will be made across the omasal impression of the visceral surface of the liver sufficiently deep to cut the smaller branches of the bile duct. A second transverse incision will then be made across the visceral surface of the liver from beside and below the caudate lobe again cutting the smaller branches of the bile duct. The photographs, at the end of this section, illustrate the location and extent of these incisions.

\*12. All livers. Hepatic lymph nodes are to be attached and incised by a number of incisions.

#### B. Processed Meat Products

1. Issue Form MI-410-11.

2. Labeling requirements as outlined in (8) Meat Products also apply to processed products.

3. The German law defines processed meat as having been treated by one of the following methods:

- a. Heating to a minimum internal meat temperature of 149°F. (65°C.)
- b. Pickling or curing so that the meat contains at least 4 percent salt.
- c. Rendering of fats.

\*4. Beef tongues intended for cooking must be incised on the lower side from the tip to the base as a further examination for cycticercosis.

\*5. Lard must be prepared without refining. The following may be added to lard in unspecified amounts and without declaration: sodium citrate, ascorbic acid, sodium ascorbate, erythorbic acid, sodium erythorbate, tocopherols with acetic acid and with fat forming fatty acids such as stearic, oleic, linoleic, linolenic, palmitic and myristic. Laboratory samples should be submitted for the presence of BHT, BHA, and gallates which are prohibited additives. They should also be submitted for peroxide values which should not exceed 4. Samples should be taken from the final package, such as drum, box, etc. A sufficient number of samples should be taken to get a representative picture of the shipment. For example, if the lard is derived from a single lot or holding tank it is suggested that 8 or 9 of the drums should be sampled. One of the samples should be taken from the first lard drawn. Equal portions of 4 of these single samples (not more than 4) can be combined in a composite sample. The lard shall not be older than 8 weeks from time of production to time of export. It may be exported only in the following containers:

- a. Wooden boxes holding 25 kilograms (approximately 55 pounds) with one partition forming two 12.5 kilogram parcels. The wooden boxes must be lined with impermeable paper so as to cover the commodity completely.
- b. Carton holding 10 kilograms (approximately 22 pounds). The carton must be made of impermeable material or be lined with paper as in "a."
- c. Metal drums of approximately 180 kilograms capacity (approximately 397 pounds), the inside walls of which are of acceptable noncorrosive material.
- d. The restriction on antioxidants in lard may be waived for special purchases of lard intended for Berlin storage purposes when specifically requested by the foreign importer. The certificates for these shipments containing BHA, BHT, and/or gallates should be modified by including a statement indicating the presence of the antioxidants and the amounts added.





Incising Visceral Surface of Liver Below Caudate Lobe



Incising Omasal Impression of Visceral Surface of Liver



324.23 GREAT BRITAIN - UNITED KINGDOM

A. Meat Products

\*1. Cooked pork may be exported without restriction. This includes all pork products that do not have to be further cooked to be consumed. Hams are under a quota and hence their importation is restricted.

2. Fully cured bacon and ham may be exported from the U.S.A. to Great Britain for consumption in U. S. Force troop messes (including officers and NCO messes) or for resale in U. S. Force commissaries under a license issued by the British Ministry of Agriculture, Fisheries and Food.

Each consignment must be accompanied by a certificate signed by a duly authorized officer of the United States Federal Government describing fully the process of curing to which the product has been subjected, which shall be one of the following:

- a. Pumping with brine under a pressure of 80 pounds or more to the square inch and subsequently soaking in brine or dry salting for a period of not less than four days.
- b. Salting (wet salting or dry salting) for a period of not less than ten days.
- c. Each consignment must be accompanied by a certificate signed by a duly authorized officer of the U. S. Federal Government, certifying the the hogs from which the meat is obtained were derived from and slaughtered in a state participating in the United States Hog Cholera Eradication Program.

3. Fresh and processed pork products (excluding fully cured bacon and ham) may be exported from the U.S.A. to Great Britain for consumption in U. S. Forces troop messes only under a license issued by the British Ministry of Agriculture, Fisheries and Food.

- a. The refrigerated pig meat and processed pig products shall comprise any or all of the following items which will not require trimming or processing before being cooked: Pork loins, spare ribs, Boston butts, and ready-to-eat sausage containing pork.
- b. Each consignment must be accompanied by a certificate signed by a duly authorized officer of the U. S. Federal Government, certifying that the hogs from which the meat is obtained were derived from and slaughtered in a state participating in the United States Hog Cholera Eradication Program.



c. That the refrigerated pig meat and processed pig products come from slaughterhouses subject to Federal meat inspection and processed products (such as sausages) from processing plants which obtain meat exclusively from federally inspected plants.

d. The refrigerated pig meat and processed pig products shall be packed in leakproof containers.

e. Refrigerated pig meat and processed pig products from the United States shall be consumed in American Forces messes (in recognized American Camps) and shall not be removed from these messes for any purpose whatsoever.

f. Packages of refrigerated pig meat and processed pig products shall be kept hard frozen until taken into the mess kitchens for defrosting immediately before cooking. All wrappings, including leakproof containers, shall be destroyed on the camp site by burning.

g. All swill shall be disposed of solely to the collectors approved by the Minister of Agriculture, Fisheries and Food.

\*4. Livers, with the exception of lamb livers, must have the hepatic lymph nodes attached.

5. The following is prohibited importation:

a. Scrap meat -- Meat which consists of scraps, trimmings, or other pieces (with or without bone), of such shape or in such condition as to afford insufficient means of identification with a definite part of a carcass.

b. Meat comprising the wall of the thorax or abdomen from which there has been detached any part of the pleura or (except in the case of meat derived from a pig) the peritoneum, other than a part necessarily removed in preparing the meat.

c. Meat other than mutton and lamb from which a lymphatic gland, except a gland necessarily removed in preparing the meat, has been taken out.

d. The head of an animal without the submaxillary gland.

6. At the exporter's request, lard destined to England and Scotland may be loaded in ships' tanks that have not been inspected for cleanliness by meat inspection personnel. The export certificate issued for these shipments will be properly qualified with a statement indicating the tankers were not inspected for cleanliness by the meat inspection personnel.

a. An inventory of U. S. Inspected and Passed lard or rendered fats will be maintained when these products are handled under the Identification Service. This will include additions to and removals from each tank. The inspector should be able to estimate the amount of product in storage at all times.

b. An inspection opening will be required in each tank. The connection of the tank to any line will be broken by the removal of a 1-foot section of pipe at the time the tank is sealed. Transfer from the tank to the ship will only be permitted through a line having no other connections than to the tank. Otherwise the transfer will be accomplished by tank trucks.

c. The ships' tanks should be examined to ascertain they are empty before operations are started. If operations are interrupted for any reason, the hatch on the tanker will be sealed and not broken until operations are resumed under supervision. Whenever possible, weights should be checked with the marine surveyor.

d. One export stamp, Form MI-412-10, should be issued for each ships' tank that is utilized. The stamps should be applied to the tanks.

\*7. Edible fats and oils exported to the United Kingdom may contain antioxidants in the following amounts:

Propyl gallate, octylgallate, dodecylgallate, or any mixture of the three -----	100 ppm
Butylated hydroxyanisole (BHA) -----	200 ppm
Butylated hydroxytoluene (BHT) -----	200 ppm
Any Mixture of BHA and BHT -----	200 ppm
Citric Acid -----	100 ppm

The label on product containing antioxidants must include a description of the antioxidant and the maximum amount expressed in parts per million.

8. The following statement may be added to the reverse side of the export certificate for products other than pork: "I certify this shipment contains no pork meat and product is derived from an abattoir operating under Federal meat inspection.

Signed . . . . ."

9. After April 1, 1967, the United Kingdom authorities will recognize the Federal meat inspection legend, including the establishment

number of the producing plant, as being the "official certificate" for the importation of all product from the U. S. in place of the regular export stamp, Form MI-412-10. The mark of inspection is to be a printed inspection legend in the form illustrated in Section 317.2 of the Meat Inspection Regulations. It will, however, be necessary to continue using Form MI-412-3, Regular Export Certificate, and Form MI-412-10, Export Stamp, for all meat, meat food products and meat byproducts intended for export to the U. K. This is necessary to comply with Section 324.3 of the Meat Inspection Regulations.

Bulk animal fats to be exported in ships' tanks must be accompanied by an approved label for the product bearing the inspection legend, including the establishment number of the producing plant. Where the product originates from more than one establishment, there must be a label from each producing plant. Bulk lard and other rendered animal fats shipped from Identification Service installations may be accompanied by a label for the product approved for the installation.

The inspection legend will include an establishment number in the 3000 series.

The label or labels for bulk fats should be attached to the export certificate, Form MI-412-3, which should accompany the shipment. The exporter should deliver the certificate with the attached labels to the cargo officer of the ship.

#### B. Casings

1. Must be identified by a label with an inspection legend approved for the casings and attached to the container. The inspection legend shall include an establishment number in the 3000 series. (Food Inspection Service). To be eligible for the mark of inspection, the casings must be:

- a. Handled in a sanitary manner.
- b. Derived from federally inspected establishments.
- c. Packed under the Food Inspection Service.

2. Upon request of the exporter, Form MI-415-5, Special Export Certificate for Animal Casings, may be issued in duplicate to cover each exportation.

### 324.24 GUATEMALA

#### A. Meat Products

1. Export certificate to be visaed by consul of that country.

### 324.25 HAITI

#### A. Casings



Section 324.25(A1)

1. Export certificate to be visaed by consul of that country.

324.26 HONG KONG

A. Meat Products

1. Regular export certificates will be issued for all export shipments to the Crown Colony of Hong Kong.

2. The following are refused entry:

- a. Scrap meat; i.e., meat which consists of scraps, trimmings, or other pieces (with or without bone) of such shape or in such condition as to afford insufficient means of identification with a definite part of the carcass.

- b. Carcasses from which the pleura or peritoneum (except pigs) has been removed.

- c. Meat without skeletal lymphatic glands (except mutton and lamb).

324.27 IRELAND

A. Casings

1. Containers of animal casings consigned to Ireland shall be marked with the regular export stamp (Form MI-412-10). Each exportation shall be covered by Form MI-415-5.

324.28 ITALY

A. Meat Products

1. Export certificate to be visaed by consul of that country.

- \*2. Oleo oil required to contain 5 percent of sesame oil. The export certificate accompanying the shipment shall bear the statement "oleo oil to which exactly 5 percent of sesame oil has been added."

324.29 JAMAICA

A. Meat Products

1. To the export certificate covering fresh, frozen, cured and/or smoked meat should be added the statement "The United States is free from Foot-and-Mouth Disease."

324.30 JAPAN

## A. Meat Products

\*1. The following information in a Department letterhead certificate should accompany the regular export certificate for shipments of other than canned meats:

- a. Name and address of exporter.
- b. Name and address of importer.
- c. Kind (species) of animal.
- d. Quantity and weight (gross and net) of product.
- e. Name of inspecting authority.
- f. Dates of slaughter.
- g. The meat or meat product herein described was derived from animals which received ante-mortem and post-mortem inspection and showed no evidence of communicable animal diseases.

324.31 KENYA

## A. Meat Products

1. Issue regular certificate, Form MI-412-3.

## B. Casings

1. Issue sanitary certificate, Form MI-415-5.

324.32 MALAYSIA

## A. Meat Products

1. Carcasses, meat and meat food products intended for export to the Federation of Malaya must be accompanied by the following certification:

- a. A general veterinary certificate stating that the country was free from foot-and-mouth disease and rinderpest for six months immediately prior to the slaughter of the animals from which the products for export to the Federation were derived.
- b. A certificate stating that the meat or meat food products have been derived from animals subjected to ante-mortem and post-mortem examinations and have been found to be free from infectious and contagious disease and that the products for

export to the Federation are fit for human consumption and that every precaution has been taken to prevent contamination prior to export.

c. An import permit from the state veterinary officer permitting the importation of such product into Malaysia.

\*d. In the case of pork or pork products, a further veterinary statement is required certifying that the country or district was free of swine fever (hog cholera) during the last six months. "District" has been interpreted to mean a state or county. This statement is not required for canned pork products or for lard.

324.33 MEXICO

A. Meat Products

1. Five copies of the export certificate are required. The fifth copy should be a photostat of the original.

324.34 NETHERLANDS

A. Meat Products

1. Form MI-412-9 to be issued in addition to regular export certificates (except rendered animal fats).

2. The following fresh or frozen products from animals slaughtered in the U.S.A. are eligible for entry.

a. Beef cuts, with or without bone, weighing at least 6½ pounds. Each cut is to be branded.

b. Beef tails and beef tenderloins of any weight. Each piece is to be branded.

c. Pork bellies, hams, shoulders and loins. Each piece to be branded.

d. Edible organs.

3. Trichinae treatment is required for all product containing pork, including pork livers, pork kidneys and hog casings. The entire or partial treatment may take place prior to export or in bonded storage at destination. One of the following trichinae certifications will be signed by the veterinary inspector on the reverse side of Form MI-412-9.

a. Full treatment prior to export.

(1) "The pork has been refrigerated continuously for a



period of three weeks at a maximum temperature of minus 15°C. (5°F.)"

(2) "The meat product has been heated in such a manner that an internal temperature of at least 80°C. (176°F.) has been reached."

b. Partial treatment prior to export.

(1) A statement given for actual freezing time supervised, e.g. "The pork has been refrigerated continuously for a period of five days at a temperature of minus 15°C".

c. No treatment prior to export.

(1) "No Trichinae Certification."

## B. Rendered Animal Fats

1. The following antioxidants may be added to rendered animal fats or to combinations of rendered animal fats and vegetable fats exported to The Netherlands: dodecylgallate, octylgallate, propylgallate. The permitted amount of these antioxidants may not exceed 0.01 percent when used either singly or in combination.

2. The antioxidants dodecylgallate and octylgallate are not among those listed in 318.7(b) of the Meat Inspection Regulations but may be used for export only as provided in 318.8 of the Regulations.

3. Regular export stamps (MI-412-10) and certificates (MI-412-3) will be used as well as a certificate in the following form which may be executed by the responsible veterinary inspector at the request of the exporter:

"The undersigned (name and title of the authorized veterinary officer  
in the country of origin), at \_\_\_\_\_, certifies: that the  
edible rendered fats packed in (description of packing), gross weight  
\_\_\_\_\_, net weight \_\_\_\_\_ and marked as follows -- (name of  
product), forwarded from (place of dispatch) by (name and address of shipper)  
and destined for (name and address of consignee) forwarded by (manner of  
forwarding, name of ship when shipped), were derived from slaughtering  
animals of the type as defined in the (Dutch) Meat Inspection Act, which  
were subjected to ante-mortem and post-mortem inspection and were found to  
be entirely sound and fit for human consumption; that, insofar as it contains  
common salt, it only contains it in very small quantities; that, insofar as  
preservatives have been used, no other preservatives have been used than  
propylgallate and/or octylgallate and/or dodecylgallate, and that the total  
contents of these gallates do not amount to more than 0.01 percent; that it  
is free from all other substances foreign to animal fats and oils; that the  
composition is in conformity with the composition as may be expected in view  
of the mark stated; that the composition in no respect is in contravention  
of the purport of this certificate.

Given at \_\_\_\_\_, on \_\_\_\_\_.

\_\_\_\_\_  
(Signature)

Meat animals as defined in the Dutch Meat Inspection Act are: Horses, cattle, sheep, goats, and swine. If the rendered animal fats being exported are derived from horses, regular export stamps and certificates will not be used.

C. Casings

1. Forms MI-415-5 and 412-9 shall be issued for animal casings destined to the Netherlands.

324.35 NEW ZEALAND

A. Casings

\*1. May be admitted at the ports of Auckland, Gisborne, Napier, New Plymouth, Wanganui, Wellington, Lyttleton, Timaru, Port Chalmers, Dunedin, or Bluff, when accompanied with a certificate in the following form duly executed by the exporter and Division inspector:

Form No. 1

I, (give name and status) of the (give name of premises), (where casings produced or prepared) situated at or near (give name of town) in the country or district of (country), in the country or State of (State) do hereby solemnly and sincerely declare that the sausage casings more particularly described below to be shipped by \_\_\_\_\_ of \_\_\_\_\_, to \_\_\_\_\_ of \_\_\_\_\_.

- a. Were derived from animals which received ante-mortem and post-mortem veterinary inspection at the time of slaughter;
- b. Were found to be healthy and in every way suitable for human consumption;
- c. Are sound, healthful, wholesome, and otherwise fit for human consumption;
- d. Have not been treated with chemical preservatives or other foreign substances injurious to health;
- e. Have been handled only in a sanitary manner; and
- f. Were not exposed to contagion prior to exportation.

Description of Casings

Number and Description of Packages	Description of Casings	Brands and Marks

And, I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provision of (state here under what statutory provisions the declaration is made) \_\_\_\_\_.

Signed \_\_\_\_\_"

Declared at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_, before me.

Signed \_\_\_\_\_"

In any country outside the British Commonwealth the declaration is to be made before a British consul or vice consul, or before any other authorized person.

## Form No. 2

Government veterinarian's certificate to accompany sausage casings to New Zealand:

"I, \_\_\_\_\_, a duly qualified veterinarian, now employed by the Government of \_\_\_\_\_, hereby certify that I have no reason to doubt the correctness of the above declaration in any particular. Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_.

Signed \_\_\_\_\_"  
(Veterinary Officer in Charge -  
Meat Inspection Program)

Accordingly, a certificate as a single document, including Form No. 1 and Form No. 2 as above specified, shall be furnished in duplicate fully executed by the exporter and Officer in Charge for each consignment of sausage casings of animal origin destined to New Zealand. The certificate forms shall be supplied by the exporter. The animals are to be slaughtered in official establishments and handled only in a sanitary manner. Inspectors will satisfy themselves of the origin casings and the sanitary handling thereof before issuing certificates. Furthermore, all such casings intended for exporting to New Zealand shall first be examined by inspectors and only those found fit for use as sausage containers in official establishments shall be certified. A copy of each certificate shall be placed in the Circuit file.

324.36 NORWAY

A. Meat Products



1. Certificates to be visaed by consul. Imports by license only.

B. Casings

\*1. At the request of the exporter, the following certification may be given on letterhead stationery:

"I hereby certify that the animal casings herein described were derived from healthy animals (cattle, horses, swine, sheep, or goats) slaughtered in a slaughterhouse in this country and received ante-mortem and post-mortem veterinary inspection at the time of slaughter. The product is declared fit for human consumption. The casings are clean and sound and were prepared in a sanitary manner and do not contain other preservatives than common salt (NaCl) and no coloring or bleaching agent. The barrels were thoroughly cleaned before packing and disinfected externally before leaving the plant and have not been used for products harmful to meat.

<u>Tarmsort</u>	<u>Antall Kolli</u>	<u>Vekt.</u>
(Kind of Casings)	(No. of Packages)	(Weight)

Veterinaerens Kontrollmarke pa Kolli (Veterinary Inspector's Marks on the Packages)

Avsender	Adresse
(Consignor)	(Address)

Mottaker	Bestemmelsessted
(Consignee)	(Destination)

Fraktmerke  
(Shipping Marks)

---

(Signature)  
Kontrollveterinaer autorisert av.  
(Veterinary Inspector authorized by)

Veterinaedirektoratet mads  
Gaustad."

324.37 POLAND

A. Meat Products

1. Export certificate to be visaed by consul of that country.

\*2. The following letterhead certificate signed by an official veterinarian should accompany the regular export certificate for shipment of pork:

- a. Meat is derived from hogs slaughtered in an establishment under permanent veterinary supervision.
- b. Meat is derived from animals which received veterinary ante-mortem and post-mortem inspection.
- c. Meat is sound and fit for human consumption with no indication of hog cholera (Swine Fever) or other contagious animal disease.
- d. There is no foot-and-mouth disease in the United States.

324.38 ST. VINCENT ISLAND

A. Meat Products

- 1. Export certificate covering fresh, cured, or smoked products destined to St. Vincent Island may be modified by adding the statement, "The United States is free of foot-and-mouth disease."

324.39 SALVADOR

A. Meat Products

- 1. Export certificate must be visaed by consul of that country.

324.40 UNION OF SOUTH AFRICA

A. Casings

- 1. The statement "And were free from infectious diseases at time of slaughter" may be added to Form MI-415-5 for hog casings.

324.41 SWEDEN

A. Meat Products

- 1. Prohibition on pork products due to hog cholera. On the reverse of the export certificate, "The meat or product described in this certificate was packed in a sanitary manner and is fit for human consumption."

(Signed)

324.42 SWITZERLAND

A. Meat Products

- 1. Issue Form MI-412-5.

2. Pork and pork products exported to Switzerland will be subjected to trichinoscopic examination at destination. In addition, shipments must be certified by an official veterinarian as meeting the following conditions:

- a. The pigs were derived from a state participating in the Federal-State hog cholera eradication program.
- b. The pork is derived from pigs slaughtered in a permanently supervised slaughterhouse and were found to be healthy before and after slaughter.
- c. The pork is wholesome and does not contain any antiseptic whatever.
- d. The pork has been prepared, handled, and dispatched according to the prevailing sanitary regulation.

These statements may be placed on the reverse side of the sanitary certificate or submitted separately on Department letterhead stationery.

324.43      VENEZUELA

A.      Meat Products

\*1. The following certification in Spanish or English may be added to the reverse of the regular export certificate or on letterhead stationery at the request of the exporter for pork exported to Venezuela:

"I certify that the product shipped under the certificate has been processed by a method approved by the United States Department of Agriculture which method is adequate to destroy any possible live trichinae. I further certify that this product has been held in a freezer for a period of not less than 30 days at a temperature not in excess of 5° F.

"  
\_\_\_\_\_  
Officer in Charge

"Yo certifico que el producto enviado y amperado por este certificado ha sido processado por metados aprobabos por el Departamento de Agricultura de los Estados Unidos y que son adecuados para destruir cualquier trquina que pudiese existir. Asimismo certifico que este producto ha sido mantenido en un congelador durante un periodo no menor de 30 dias y a una temperatura no excediendo 5 grados Fahrenheit."

It will be satisfactory to provide a modified variation of the certificate to suit other methods of treating pork for trichinae providing an accurate Spanish translation can be provided.



## PART 325 - TRANSPORTATION

325.1 This part deals with the interstate transportation of product derived from animals covered in the meat inspection laws and provides the methods whereby the movement of such product can be regulated.

325.2 The movement of nonfederally inspected sound and wholesome meat derived from cattle, sheep, swine, or goats from one point in a state to another point in the same state which in its course passes through another state is not considered a violation of the Federal Meat Inspection Law.

325.3 Any person who makes proper certification may ship interstate product which is U. S. Inspected and Passed and so marked provided it is sound, healthful, wholesome, and fit for human food and has not been further processed or reprocessed other than under the supervision of a Federal meat inspector.

325.4 Officers in Charge are responsible for checking records of interstate carriers in their Circuit and Subcircuit areas to determine that such carriers are complying with the requirements outlined in Part 325 of the Meat Inspection Regulations. This includes records of railroads, truck lines, airlines, railway express agencies, and post offices.

Compliance and Evaluation officers and others traveling through areas where no Meat Inspection employees are ordinarily stationed should avail themselves of the opportunity to check records of post offices and other carriers for compliance with this requirement whenever it appears to be indicated.

Inspectors will also occasionally review the shipping papers used by official establishments under their supervision to determine that they are complying with all requirements outlined in Part 325 for certifying interstate shipments.

These reviews should be made at least once each year and a report of the findings in letter form forwarded to the Washington office of the Processed Meat Inspection Division, attention Staff Officer for Special Services.

325.5 The requirements of the Meat Inspection Regulations are published in the following manuals and bulletins for interstate carriers:

A. Parcel Post - Part 125.36 and 331.46 (subparagraph .461) of the Postal Manual.

B. Railway Express Agency, Inc. - General Circular No. 2-D of the Railway Express Agency.

C. Railroads - Freight Tariff No. 362-B and Supplement issued by L. E. Kipp, Agent.

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D. Trucks - American Trucking Associations, Inc., A.T.A. Bulletin Advisory Service, pp. 25-36.

E. Airlines - Official Air Cargo Tariff Circular 1A, Section 5, pp. 29-36.

325.6 The form of the shipper's certificate and applicable requirements of this section of the Regulations should be used in connection with the movement of federally inspected horse meat or horse meat food products by proper alteration and identification to show the term "horse" preceding the word "meat;" that is, "horse meat" or "horse meat food products."

325.7 Product that is U. S. Inspected and Passed and so marked when shipped from an official establishment and conveyed interstate by vehicles belonging to the establishment need not be covered by certification outlined in Section 325.5 of the Regulations. This same ruling applies to federally inspected and marked product transported interstate by individuals in their own vehicles.

325.8 Meat Inspection Regulations provide for the application of official seals in certain circumstances to vehicles carrying unmarked or restricted meat or meat food products. The Federal Meat Inspection Law prohibits the breaking of such seals without proper authority. Such seals are sometimes broken unlawfully at destination as a result of improper loading at the origin establishment.

Such problems can be eliminated to a large extent if both shippers and inspectors assure themselves that the truck is properly loaded before the seals are applied. This assurance can result from examination of bills of lading, loading schedules, or other available information. Meat inspectors will not apply official seals until they have established to their satisfaction that the first scheduled stop for any vehicle bearing a mixed load is an official establishment. When sealed vehicles are diverted enroute, arrangements for breaking seals at the new destination should be made by the originating establishment.

325.9 Provision is made for the shipment under Meat Inspection seal from one official establishment to another of product which carries certain restrictions or which necessitates further processing or special handling.

An acceptable method of sealing fiber containers of restricted products consists of using a filament-type pressure-sensitive tape of a kind that will actually remove a part of the surface of the container whether removal is by intent or by accident.

A nonfilament-type tape that would have the same adhesive properties would also be acceptable. In using the tape method of sealing, the tape is firmly applied completely around the container in two directions and at the intersection of the two strips of tape, an impression of the 2½-inch rubber brand



is placed. The ink used in applying this impression must be of a kind that will withstand handling and remain legible during shipment of the product. An appropriately modified Form MI-408-1, furnishing complete information, should be used to notify the Officer in Charge at destination. When the shipment consists of boxes bearing a retained tag, the tag number should be shown on the form. If the boxes do not bear a retained tag, each box in the shipment should be dated and serially numbered, (starting with the number "1") and the date and box numbers should be shown on the form.

Present supplies of Brooks seals may be used until exhausted. The establishment should supply acceptable tape and ink when required.

325.10 Tank cars of inspected and passed rendered animal fat moving between official establishments shall be marked as outlined in Section 316.16 of the Regulations. This regulation now requires the sealing of tank cars and tank trucks carrying inspected and passed product from one official establishment to another.

325.11 Officers in Charge are directed to report by letter to the Washington office, after a reasonable waiting period, the nonarrival of sealed cars. Full information should be given regarding kind of product, vehicle identification, and originating establishment with other pertinent facts, including a statement from the establishment concerning its knowledge of the transaction.

325.12 Form MI-408 "Notice of Unmarked Meat Shipped Between Official Establishments Under Seal" should accompany shipments of products under seal between official establishments. The form need not contain a detailed description of the marked product. Since it is known that the unmarked product constitutes at least 25 percent of the lot moved under seal, the weight of the marked product should be entered and it should be described as "various" if that term is applicable. However, the unmarked product should be described in detail as should also restricted product such as "U. S. Passed for Cooking" or "pork product \_\_\_\_\_ °F. \_\_\_\_\_ day refrigeration" or "beef passed for refrigeration."

The Form MI-408 must be securely attached to the carrier intended. As a suggestion, the copy of Form MI-408 to accompany a railway tank car should first be placed in a paper envelope; then placed in a plastic envelope and securely stapled. A slit is then made in the plastic and the paper envelopes and the Form MI-408 is secured to the meat inspection seal. Many railway tank cars are equipped with vent bonnets which are adjacent to the dome. When present, the plastic envelope may be placed inside the bonnet and the bonnet should be secured. The Form MI-408 for a tank truck may be placed in an envelope addressed to the meat inspector at destination and placed with the shipping papers being carried by the driver. Upon arrival at destination, the Form MI-408 will be delivered to the meat inspector.

325.13 Meat food products not bearing the mark of Federal inspection, such as cured ham, bacon, lard, sausage, and the like, as well as hamburger and



chip steaks, which are transported or offered for transportation in interstate commerce under a certificate of exemption may be disposed of only to consumers such as families, restaurants, hotels, clubs, and not to any person or firm for resale as such.

325.14 For shipment of meat or meat food products to be accepted by a common carrier for transportation in interstate commerce under the authority of a certificate of exemption, it must be covered by a shipper's certificate executed in duplicate in the form set out in Section 325.10 of the Regulations. Both the original and duplicate copy of the shipper's certificate must be delivered to the agent of the transportation company accepting the shipment. The Processed Meat Inspection Division does not provide these forms and if the carrier fails to do so, the holder of the certificate of exemption should furnish his own.

A. When meat or meat food products are transported in interstate commerce under authority of a certificate of exemption in the private conveyance of the holder thereof, he should execute and mail to the Processed Meat Inspection Division a shipper's certificate.

However, when deliveries are made by private conveyance during any one day in other states to several customers who are consumers, an individual shipper's certificate for deliveries to each such customer is not necessary. Only one shipper's certificate showing the kind and total amount of product for that day and listing the consignee as "various" is required. When fresh meat not bearing the mark of Federal meat inspection is transported interstate in the private conveyance of the exemption certificate holder to another retail meat dealer, a shipper's certificate for each such interstate movement should be executed and mailed to the Processed Meat Inspection Division. Shipper's certificates covering interstate transportation by private conveyance need not be mailed to C&MS no more than once a week.

B. On the shipper's certificate used by retail meat dealers holding a certificate of exemption, whole carcasses or quarters should be listed as such under "Fresh Meats." The weight of the carcasses or quarters should also be included in the box "Number of Pounds" under "Fresh Meats" and added to the number of pounds of fresh meats shipped as trimmings or cuts if the certificate covers both carcasses and quarters, and fresh meats other than carcasses and quarters.

In reporting processed meats such as chopped, cooked, cured, dried, or canned meat, sausage or lard, it is not necessary to list each kind of product separately; they may all be grouped together and reported as one figure.

The number of nonfederally inspected carcasses that may be shipped interstate by a retail meat dealer holding a certificate of exemption is limited by the Meat Inspection Act. The number of carcasses and the fresh meat equivalents are as follows (per week):

	<u>Carcasses</u>	<u>Pounds</u>
Beef	5	3,000
Veal	25	1,875

	<u>Carcasses</u>	<u>Pounds</u>
Mutton	20	1,200
Lamb	25	1,250
Pork	10	2,000
Goat	20	1,000
Goat kids	25	500

C. It is urged that the correct form of shipper's certificate be used by retail butchers and retail dealers who are holders of certificates of exemption. It should be printed on a good grade of paper exactly 3½"x 8" in overall size. Certain entries that do not vary may be printed on the form; for instance, the shipper, his address, the exemption certificate number, and probably the point of shipment.

325.15 Identification of product derived from animals slaughtered by a farmer on the farm is acceptable if his name and address appear on the product by means of a brand, tag, label, or other appropriate means. The definition of a farmer appears in Section 21(a) of the Meat Inspection Act.

325.16 Meat and meat food products derived from cattle, sheep, swine, goats, or horses, that are to enter interstate or foreign commerce, must be U. S. Inspected and Passed and so marked; that is, fully prepared in an establishment operating under Federal meat inspection, unless the meat and meat food products are exempt from inspection. There are no exemptions from inspection provided by the Horse Meat Act, although the Meat Inspection Act provides for certain exemption for meat and meat food products derived from cattle, sheep, swine, and goats.

Therefore, nonfederally inspected meat and meat food products derived from cattle, sheep, swine, goats, or horses, that are not exempt from inspection must be treated (denatured) in a manner to alter their resemblance to an article of human food if moved interstate. This would apply to animal food composed in whole or in substantial part of material derived from cattle, sheep, swine, goats, or horses. The Processed Meat Inspection Division will give an opinion of the acceptability of the denaturing when furnished a sample.

However, animal food packed in hermetically sealed, retort processed, conventional retail-size (approximately one pound) containers and labeled conspicuously as, for example, "animal food," "dog food," "dog and cat food," is not required to be denatured. This means that the name of the product, such as "dog food," should appear on the main panels of the label in letters at least three times larger than the letters used in the words describing the materials derived from cattle, sheep, swine, goats, or horses, wherever the latter appear on the label, and with the background being equally as contrasting in the former as in the latter. In judging the 3 to 1 ratio, the height, width, and thickness of the letters are taken into consideration. If it is desired to use a label in lieu of denaturing the canned article, it is suggested that a sketch of the proposed label be sent to the Washington office. If accepted, the finished label can be printed. If the sketch is to be returned, two

copies should be furnished. The color scheme should be indicated.

Jurisdiction exercised by Federal meat inspection over labeling in lieu of denaturing in connection with canned animal food moving interstate comes from the applicability of the Federal Meat Inspection Act or the Federal Horse Meat Act and regulations promulgated thereunder. This does not override the authority of any other agency having jurisdiction in connection with the interstate movement of canned animal food.

325.17 The various forms used in reporting transactions arising from the application of Section 325.13 of the Regulations will be handled at the Circuit when permits are issued for the return to an official establishment of alleged unsound meat or product that is in commercial channels. This will mean that the triplicate copy of Form MI-409-1 will not be sent to the Washington office, but will be used as the Circuit copy. However, the original copy of the permit will be handled by the initial carrier as indicated in the Regulations and mailed to the Washington office. It is no longer necessary to use Form MI-409-2, as the disposition of the returned alleged unsound product can be noted on the Circuit copy of Form MI-409-1 without any report of its disposition being made to the Washington office.

325.18 In the event it is necessary to denature nonfederally inspected rendered fat which resembles an edible product and which is offered for exportation, importation, or interstate movement, charcoal of vegetable origin of fine particle size may be used as a denaturant in the proportion of one pound of such charcoal to 10,000 pounds of rendered fat.

The following denaturants may be used, but might not be acceptable to the shipper because of certain objectionable properties which would make the rendered fat unacceptable for the intended use:

To each 750 pounds of fat, use -

One-third ounce of brucine dissolved in a mixture of two parts of alcohol (ethyl, methyl, isopropyl, or denatured) and four parts of pine oil or oil of rosemary. (The amount of alcohol and pine oil or oil of rosemary is not specified as it is only required that enough be used to dissolve the one-third ounce of brucine.)

One-half gallon creosote.

Two gallons of pine tar.

One-fourth gallon of pyridine.

One-half gallon of No. 2 fuel oil or approved mineral oil.



When the laws or regulations of a foreign country to which such fats are being exported require or permit the use of other denaturants, such alternate denaturants may be used providing they properly accomplish decharacterization.

It is the shipper's responsibility to see that the article is acceptably denatured.

PART 326 -- FEDERAL FOOD, DRUG, AND COSMETIC ACT

326.1 Procedure of action taken by the Food and Drug Administration against interstate movement of meats and meat food products found to be in violation of the Food and Drug law is as follows:

Section 902(b) of The Food, Drug, and Cosmetic Act exempts meats and meat food products from its provision to the extent of the application of the Meat Inspection Act. Since the Meat Inspection Act contains no seizure provisions, meat and meat food products that are violative of the Food, Drug, and Cosmetic Act are not exempt from seizure under this Act. The Meat Inspection Program has welcomed in the past and will continue to welcome seizure actions by the Food and Drug Administration against violative meat food products found in interstate channels, in the interest of the protection of the public.

If a Meat Inspection Program inspector anywhere in the field encounters a consignment of a meat product that is unsound or unwholesome, he has no authority to institute action against it but he has the following responsibilities:

A. If he is stationed in a location near a Food and Drug inspector, he should notify the Food and Drug of the violation and request them to retain the product pending action under C below.

B. If no Food and Drug Administration inspector is in the vicinity, he would request an appropriate state or municipal official to initiate a similar action.

C. He should notify the owner of the violative product that action has been initiated, and that he may at his option rework the product under the Meat Inspection Program supervision to remove the cause of the violation.

1. If the owner agrees to reclean the product, the inspector (through his District Director) should arrange for release of the product and shipment under proper security to the establishment where the work is to be done.

2. If the owner refuses to reclean the product, so inform the Food and Drug Administration or State officials, and request they take whatever additional action they may desire.

If the violative shipment is discovered by Food and Drug Administration officials, they can proceed against the product under the Food and Drug law. Notification of the action should be given to the nearest Meat Inspection Program office, and an attempt made to proceed as in Paragraph C of this section.

## PART 327 - IMPORTED PRODUCTS

327.1 Part 329 of the Meat Inspection Regulations has been extended to cover the importation of horse meat and horse meat food products. Approved foreign horse meat inspection certificates are shown in Part 329 of this Manual.

327.2 It must be constantly borne in mind that meat and meat food products derived from ruminants or swine imported from countries in which the contagious and communicable diseases of rinderpest, foot-and-mouth, or African Swine Fever exist are subject to restrictions imposed by the Animal Health Division. Vessels carrying fresh or frozen meats from eligible countries are permitted to transit rinderpest or foot-and-mouth disease infected countries if the ships' compartments or holds containing the meat are officially sealed. Animal Health Division or Plant Quarantine Division personnel will determine whether these requirements have been satisfactorily met before the meat is landed. When the shipment is found to be in order, the customs entry forms will be stamped "Released by ARS Inspector." Shipments are not to be inspected for entry until the above procedure has been followed and we are assured that the meat is eligible under the Quarantine Regulations for importation.

327.3 To be acceptable, the foreign meat inspection certificate in the form prescribed in Section 327.6 of the Regulations must be signed by an official authorized by the national government of the foreign country in which the product is prepared and whose name and signature have been officially published. A foreign meat inspection certificate which is approved and published may be accepted in lieu of the foregoing described certificate regardless of whose signature appears thereon.

327.4 Each import shipment of canned corned beef, which contains head meat, cheek meat, and/or heart meat shall be covered by a certification in addition to the regular approved official meat inspection certificate of the country of origin. The additional certification shall state that the canned corned beef contains no more than 5 percent individually or collectively of head meat, cheek meat, and/or heart meat. This certification may be made a part of the regular official meat inspection certificate of the country of origin or it may be a separate certificate provided it is signed by the same official that signed the official meat inspection certificate. Canned corned beef from Argentina, Uruguay, Brazil and Paraguay containing head meat and/or heart meat should not be allowed entry.

327.5 Since canned product is heated to a temperature sufficient to destroy trichinae, no purpose would be served by requiring a certificate, as outlined in Section 327.6(f) of the Regulations, for canned product containing pork.



327.6 Occasionally, a consignment of canned meat or meat food product covered by one foreign official meat inspection certificate will be separated into several lots. These lots will be unloaded at various ports. Usually such shipments consist of canned product from South American countries. For the handling to be uniform at various ports, the Circuit that presented the original official meat inspection certificate covering the entire consignment will request the broker to furnish sufficient copies (photostat) so there will be one for the Officer in Charge at each Circuit where one of the lots is destined. The initial Circuit will authenticate each of the certificate copies, placing on it the name of the Circuit to which the copy applies and the number of cases of product that will be put ashore there. The original certificate will be marked to indicate the same information, but if there is not sufficient space on the certificate to do this, the information should be placed on a separate sheet and securely affixed to the certificate.

327.7 Officers in Charge occasionally receive requests to inspect imports at other than official establishments. They are authorized to make these inspections in compliance with Section 327.8 of the Regulations. This applies whether the product is located within the limits of the official Circuit or Subcircuit or at a place so situated geographically that the import inspection would logically be handled by the Circuit receiving the request. In the latter case, the availability of an inspector must necessarily be considered. For example, if the meat inspection work at any of our small Circuits is such as to require the constant attention of the inspector or inspectors there assigned to a degree that the request cannot be honored, then the person making request for service should be so informed and asked to resubmit his request either to the Officer in Charge of a larger Circuit near the place where the product is located where an inspector would be available, or to the District office.

The party requesting the inspection service is to reimburse the meat inspection appropriation for the expense of travel and subsistence that an inspector incurs while away from his official Circuit. No charge is made for the base time of the inspector, but the party requesting the service is to reimburse the meat inspection appropriation for inspection during an overtime period.

327.8 The following import procedure applies to canned, fully processed hams, shoulders, shoulder picnics, pork loins, bacon, luncheon meat, pate de foie, or other canned product containing pork. After the 5 to 10 percent inspections reveal less than 1/4 of 1 percent of unsound or suspicious cans, one case of the lot will be incubated as outlined in Section 327.8 of the Regulations. If any suspicious or unsound cans develop in incubation, the report should be referred to the Processed Meat Inspection Division.

Officers in Charge may permit the release of these shipments following the routine import inspection but prior to the completion of incubation of the sample providing previous shipments or similar product (same brand and/or manufacturer in the foreign country) have been found to be consistently satisfactory. The number of satisfactory previous shipments should be sufficient to satisfy the Officer in Charge that the manufacturer is following competent canning and processing practices. If, however, incubation indicates

a serious unsound condition, redelivery of the lots should be requested and subsequent lots held pending incubation.

327.9 There appears in the Working Reference a list of foreign meat establishments by number, name, and location. The establishments are listed in numerical order under the names of the foreign countries (in alphabetical order) whose meat inspection system we consider comparable to ours. This is in accordance with the criteria shown in the May 1963 amendment to Part 327.2 of the Meat Inspection Regulations. Countries have been informed that the identifying number and name of the producing establishment must appear on the approved foreign meat inspection certificate covering shipments.

Product will be inspected at entry points from only those establishments that appear on the published listing. Import inspectors will check the origin of shipments before making inspection of products.

327.10 The inspection of all imported products, whether such inspection is made at the port of entry or at destination and regardless of country of origin (whether from so-called foot-and-mouth countries or others), will be conducted in the same general manner to determine whether the product is acceptable. The acceptability of all imported products will be on the basis of a complete lot presented for inspection and covered by an approved certificate of the foreign country. Acceptance will depend on whether such product is judged to be sound, wholesome, and otherwise fit for food and neither adulterated nor mislabeled on the basis of an examination of a number of units withdrawn as a sample from the lot.

For destination inspection, it is not necessary to delay the import inspection until the three mailed copies of the Form MI-410 are received from the Customs Officer. Inspection may be made upon presentation of the fourth copy and the foreign meat certificate that accompanies the shipment, provided the inspection point shown on the form is the Circuit where the product is presented.

If the shipment has been diverted from its original inspection point, the inspector at the Circuit where the product is presented will not inspect until the importer or shipper arranges for him to contact the Circuit where the first three copies of the Form MI-410 were sent. This can be done by telephone at the importer's expense if he wishes to expedite the inspection. After the inspector has arranged to have the copies of the Form MI-410 forwarded to him, he can proceed with the inspection.

If the fourth copy of MI-410 is received at a Circuit and the import shipment does not arrive within a reasonable time (10 days to 2 weeks) and there is no other information that the shipment has been diverted, then the inspector will notify the Director of Customs at the port of entry of the nonarrival of the shipment and request that redelivery of the shipment be demanded by Customs under the redelivery bond.



## Section 327.10

The standard of acceptance will be the same as would apply to acceptable product shipped from a federally inspected establishment. The inspector must be sure that the selection will give him a cross section of the lot. The selection of packages to be examined will be done by the inspector. If the examination of the sample discloses that the product is unsound, unwholesome, and otherwise unfit for food, the lot will be refused entry or destroyed for human food purposes.

327.11 Facilities required for import inspection should include the following:

- A. Freedom from dust, flies, and insects;
- B. Sanitary rust-resisting metal tables, preferable of stainless steel;
- C. Adequate lighting with a minimum intensity of 50 footcandles;
- D. Ample supply of water for cleaning and hand washing.

327.12 Facilities for defrosting and inspection of the thawed samples must be provided by the importer in convenient locations. These facilities should include the requirements of 327.11. In addition, defrosting rooms must be adequately drained and hot and cold water must be available in the immediate area for cleaning and hand washing.

327.13 In the dockside inspection of frozen (tempered) meats, washrooms should be available to the inspectors and service contractors within reasonable distance. A minimum of three men should be assigned to each import inspector for the handling of the samples. One of these men should be designated to remove the meat wrappers after the boxes have been opened. He should not be permitted to handle the shipping containers at any time.

327.14 Product may be stamped before the completion of inspection only if the lot is to remain in storage in the immediate area. Under the circumstances, it is to be available for the removal of the inspection stamps if the shipment is rejected. We cannot allow stamping until after inspection of the product is to be delivered to the consignee or shipped to destination.

327.15 Primal or retail cuts of meat, either boneless or bone-in individually wrapped in a manner that permits separation of the pieces, may usually be satisfactorily inspected in the frozen state by tempering to remove surface frost. Imported edible organs and such products as tongues, tails, cheek meat and head meat should be routinely defrosted.

327.16 Inspectors are to personally select samples for inspection. It cannot be assumed that any lot is sufficiently scrambled during shipment to



allow the indiscriminate withdrawing of samples by service contractors or warehouse personnel. Samples selected by the inspector should be carefully marked and identified, particularly if they are to be examined at another location or at a later date.

327.17 A Circuit history of all imported processed products must be maintained. The record of each entry should include establishment of origin, name of product, the amount of product, date of entry, results of inspection, and the disposition of the shipment.

The history is to be used to determine factors such as the necessity for laboratory samples, necessity for holding shipments pending laboratory findings, necessity for holding shipments pending completion of incubation, and deciding disposition of shipments in doubtful cases. Product history may be communicated from one Circuit to another at the request of an importer.

327.18 Data, based upon the experience at your Circuit, should be submitted to the Processed Meat Inspection Division in the event you recommend a change in the handling of any particular product.

327.19 Sample size for opened can product examination of imported comminuted type product:

<u>Lot Size</u>	<u>Sample Size</u>
Less than 2000 cans	One percent of the consumer-size cans in the shipment or one institutional-size can.
2000 to 50,000 cans	Twenty cans of 1-pound net weight or less; for institutional-size cans open 20 pounds net weight of the product to the closest unit; e.g., two 10-pound cans, three 6-pound cans, four 5-pound cans, etc.

Larger consignments should be divided into two or more lots and sampled proportionately on the above basis.

Sample size for product examination of canned hams, canned picnics, canned pork loins, and other canned imported items which consist primarily of a solid, single piece of meat:

<u>Lot Size</u>	<u>Sample Size</u>
1 - 2000 cans	One can
2000 - 4000 cans	Two cans
4000 - 6000 cans	Three cans

The number of cans opened in larger entries should be in the same proportion; i.e., one can for each 2000 cans in the consignment.

327.20 Concurrently, with the examination of the product, a sufficient number of the opened cans should be washed, dried and weighed to determine the average tare weight. The instructions in Part 317 of the Manual should be followed in this regard. In most cases, a minimum of 50 unopened cans should be weighed to determine the accuracy of the net weight statement.

When cans weighing more than one pound are examined and the tolerance allowed in Section 317 of the Manual is slightly exceeded, one additional can for each 1000 cans in the shipment may be opened and weighed. The average net weight should equal the stated net weight. Thus, in a shipment of 3000 cans, two cans would be initially opened for product examination. If additional samples are indicated due to short weight, three more cans may be opened and weighed. Acceptance or rejection of the lot would then be based on the average net weight of the five cans. Paragraphs 327.8(n) and (q) of the Regulations, as well as the instructions in this Manual, regarding the incubation of sterile canned products containing pork remain unchanged.

327.21 All canned imported pork products such as canned hams, pork shoulder picnics and loins shall pass certain added substance requirements based on estimated yields for canned ham products as used in federally inspected establishments (Part 318 of the Manual). The zones of control are identified as follows:

Zone C analytical results 108 percent to 110.8 percent estimated yield,

Zone B analytical results 110.9 percent to 113.5 percent estimated yield

Zone A analytical results 113.6 percent to 116.2 percent estimated yield.

In applying this general principle to imported canned pork products, single sample results which fall in Zone C or less indicate an acceptable lot from the standpoint of added substance. If the single sample falls in Zone B, the inspector will refuse entry of the lot or submit an additional sample to the laboratory. If this second sample falls in Zone C or below, the lot will be considered acceptable. If the original sample falls in Zone A, the product will be refused entry or two additional samples may be taken. If they both fall in Zone C or below, the lot will be considered acceptable; otherwise, it will be refused entry. Any sample results above Zone A should result in the product being refused entry.

327.22 No major reconditioning, sorting, or rehandling will be permitted by the inspector unless authorized by the Processed Meat Inspection Division.

In no case will permission be granted for reconditioning of product which has been refused entry for any condition that indicates the product was improperly prepared or certified in the country of origin.

327.23 Occasionally products are found to be seriously unacceptable after release by the Meat Inspection Program following the initial import inspection (for example, canned meat products might be found to be underprocessed). In these instances and after counsel with the Processed Meat Inspection Division, local Director of Customs may be asked to demand redelivery of the product if it has already been distributed.

327.24 The number of cans found upon sample inspection to be unsound owing to nail or hook holes, crushed or badly damaged seams, or other external marks of violence need not be included in the total number of unsound cans when the calculation is made to determine the percentage of suspicious and unsound cans in a consignment. However, disposition of such unsound cans must be in accordance with the Regulations.

327.25 Undercooked (less than 150° F.) perishable canned product cannot be allowed entry from foot-and-mouth disease infected countries under Animal Health Division regulations. These include all of the European countries presently exporting canned meats to the United States. The Meat Inspection Regulations also require perishable canned products to be processed to a minimum of 150° F. internal temperature. If underprocessing is confirmed, submit the laboratory report, Form MI-422-2, immediately to Processed Meat Inspection Division. Disposition of the shipment should be noted on the reverse side of the form. The following consignment of the same product is to be held until laboratory results are obtained.

327.26 When it is necessary to correspond with the Processed Meat Inspection Division concerning a particular consignment of imported product, it is important that full identification of the shipment be given in the opening paragraph of the letter. This should include:

- A. Number of cases, where canned product is involved, or weight of bulk shipment.
- B. Number and size of units in the container.
- C. Name of product, including brand name.
- D. Country of origin.
- E. Name of vessel or car number.
- F. Date of arrival.



- G. Customs entry number.
- H. Name and address of consignor.
- I. Name and address of consignee.
- J. Any other pertinent identification.

For example: 2000 cases (48/12) blank brand canned corned beef, Product of Argentina, ex S.S. Rowboat, November 12, 1959, Customs Entry No. 2 consigned by blank blank and company, Buenos Aires, Argentina, to blank and company, 211 East First Street, New York.

327.27 Form MI-450, Score Sheet for Boneless Meats, provides the sampling plans and criteria for acceptance and rejection of product. It also classifies the various defects. In addition, the two following sampling plans may be used on lots consisting of over 500,000 pounds and containing several different marks.

Sampling Plans and  
Criteria

Lot Size	Plan No.	No. of Cartons	Sample No.	No. of Sample Units	Ac & Re Criteria					
					Major Ac	Re	Critical Ac	Re	Total Ac	Re
500,000 & over	VI	33	1	33	0	6	0	2	12	21
			2	56	-	-	-	-	-	-
			Total	89	5	6	1	2	45	46
	VII	40	1	40	0	6	0	2	15	25
			2	71	-	-	-	-	-	-
			Total	111	6	7	1	2	56	57

In using any one of the sampling plans take approximately 12 pounds from each of the required number of packages. This sample unit may be one 4-inch slice or two 2-inch slices from a frozen block of meat, or 12 pounds from a package that has been entirely defrosted. Make a random selection of the cartons in the lot from which sample units will be taken. All cartons from which sample units are taken should be positively identified by the inspector by initialing or marking in some other manner. The samples are to be thawed to the extent that the pieces may be easily separated. A thorough inspection is then to be made of each piece and the defects classified and recorded on Form MI-450. Based on the criteria listed in Form MI-450 the lot is accepted, rejected or additional sample units inspected (Sample 2). If the examination of additional sample units is required, the additional units are to be drawn from the same containers selected for the original examination. All of the defects found in sample 1 and sample 2 are to be totaled and the

lot accepted or rejected in accordance with the total criteria of the applicable sampling plan in Form MI-450. Form MI-450 is to be completed in duplicate. File the original with the Form MI-410 at the Circuit where the import inspection is made. The duplicate is to be mailed to the District Office where it is to be filed by country of origin.

327.28 Foreign product presented for importation bearing grade markings the same as those used by the Meat Grading Branch, Livestock Division, Consumer and Marketing Service, United States Department of Agriculture, should not be passed for entry into this country until such time as the grade markings have been verified by a representative of the Meat Grading Branch.

327.29 The term "New Zealand Genuine Spring Lamb" may appear on carcasses of new-crop lambs slaughtered in New Zealand during the period beginning October 23 and extending to the following May 31. A signed typewritten certification to the dates of slaughter shall appear on the reverse of the official New Zealand meat inspection certificate accompanying the importation of lambs marked in this manner.

327.30 Imported lamb, other than carcasses with foreshanks attached, must be accompanied by an additional official statement on the foreign meat inspection certificate. The statement should identify the meat described on the certificate as derived from animals of the ovine species which were less than one year of age and on which the foreshanks broke at the distal epiphyseal cartilage of the metacarpal bone.

327.31 The markings of cartons of meat product offered for entry should be approved locally. Such designations as "bull beef", "cow beef", "fore-quarter beef", "hindquarter beef", etc., should not be permitted. The proper designation is "boneless beef" followed by the statement concerning the country of origin. We have no objection, however, to the use of code marks to distinguish the various trade categories of boneless beef. The code marks should have no labeling connotation.

327.32 The maximum quantity of ham, bacon, and fresh meat permitted entry for personal use of the consignee is 100 pounds; canned meats, sausage, and similar products other than summer sausage is 50 pounds; lard, 20 pounds; summer sausage, 20 pounds.

327.33 The instructions relative to personal consumption entries require that boneless cured or cooked meat from countries in which foot-and-mouth disease or rinderpest exists must be entered and handled in the same manner as regular commercial importation in order to comply with Animal Health Division rulings.

327.34 The usual methods of handling rejected product are by re-exporting it under Customs custody or by destroying it by incineration or tanking under the supervision of a meat inspection employee. If the imported product

has been refused because of soilage, contamination, or other reasons that would not preclude its use as an animal food (and such use would not be in conflict with Federal and State laws or regulations), it may be decharacterized by freely slashing the product and coating all surfaces with finely powdered charcoal; by coloring the product with a suitable dye solution; or by grinding the product with coarsely ground hard bone so that the resultant article would be effectively removed from a human food category.

When shipments are rejected on destination inspection, the Director of Customs at the original port of entry must be notified of this decision. He should be advised to supply evidence of re-exportation of the product. The Customs station having responsibility for the entry is identified in Block 1 of Section D of the Form MI-410. It is not, however, necessary to seal the shipment for return to the port of entry.

The rejected product must be handled in a manner that will limit our supervision to a minimum at the port or place of inspection. No charge is made for this type of supervision, since it is part of our normal import responsibilities to see that rejected meats are destroyed for human food purposes or re-exported under Customs custody.

If, however, the importer prefers to move the rejected product without decharacterization to an animal food manufacturer or canning plant where it will be used as an ingredient of animal food, such movement and additional supervision may be done by a meat inspection employee only on a reimbursable basis. The animal food manufacturer must apply for Animal Health Division "Certification of Inedible Animal Byproducts" service as outlined in Animal Health Division Memorandum No. 592.1. This arrangement provides for supervision of the rejected article until it is canned or labeled as animal food or otherwise decharacterized.

Shipment of rejected product between Circuits must be in sealed conveyances. Part 4 of MI-410 may be used to notify the Officer in Charge at destination. The completion of the disposition should be indicated on this copy which is then returned to the originating Circuit.

In some cases involving breach of Customs bond for failure to comply with meat inspection requirements in the importation of foreign meat or meat food product, local Directors of Customs are authorized to assess a money penalty less than the full liquidated damages after having come to an agreement with the local Officer in Charge of Meat Inspection. The Officer in Charge should not make any recommendations on the assessment in lieu of liquidation. He should communicate with the Processed Meat Inspection Division, through his District Office, giving full particulars involving the mishandling. He then will be advised concerning the penalty to be recommended.

327.35 It is important that only one report on Form MI-410 be made for each entry. Otherwise, there is a possibility of duplication in our records. If, however, it is necessary to send in a correction, the report should be



conspicuously identified with the words "Corrected Report" at the top of the form and the date of the report that it supersedes. It is important to the Processed Meat Inspection Division to receive immediate information on the origin of unsuitable imported product. As a means of obtaining this information, a copy or facsimile of the import certificate should be forwarded to the Officer of Export-Import Standards whenever a foreign consignment is refused entry.

The certificate need not be sent in where rejections are made because of damage in handling or in instances where the product does not exceed allowable tolerances and is passed for entry. It is, however, necessary that we have this information when substantial quantities of a shipment are refused entry.

In addition to the data supplied by the foreign government, the following information should be typed or legibly handwritten on the certificates:

- A. Place (Circuit) and date of inspection.
- B. Customs entry number.
- C. Foreign establishment or establishments of origin.
- D. Amount of product inspected.
- E. Cause of rejection.
- F. Total amount of product refused entry.

The details concerning the cause of rejection are necessary. A statement such as "contamination" should be amplified, for instance, to describe the type of contamination discovered. In lieu of this, a copy of Form MI-450 should be attached to the certificate for rejected manufacturing meats.

In the event of rejection of an entire lot of imported product, the original foreign meat inspection certificate may be returned to the importer. A notation, signed by the Officer in Charge, should be made on the face of the certificate that the product was refused entry into the United States. It is not necessary to state the cause of rejection.

When imported product is rejected, the MI-410 may be distributed as soon as the importer or his agent indicates that the shipment will be re-exported. The re-exportation then becomes the responsibility of the Director of Customs. The MI-410 should, however, be held if product is to be denatured, or diverted to animal feed under our supervision. In such instances, the control of the rejected product is the Program's responsibility. Under these circumstances, the MI-410 should be distributed after disposition has been completed.

327.36 Form MI-410, "Import Meat and Meat Food Products Report" should be used to report all import inspections. Importers or their agents may obtain copies of this form from the nearest Meat Inspection office or Customs station.

A. The form should be completed as follows:

1. Port of Entry Inspection.-- Sections A, B, and C are to be completed by the importer or person acting as his agent.

2. Section B is to be completed with Section A but only when product is to be inspected at a location other than its present location such as from docks to warehouse. Product cannot be transferred to a location outside the limits of the Meat Inspection Circuit.

3. Destination Inspection.-- Section D is to be completed by the importer or person acting as his agent. (Used principally at Canadian and Mexican ports of entry).

4. Section E-- Disposition.-- This section and the block "Circuit Name and Number" at upper right-hand corner are to be completed by the meat inspector who made the inspection.

B. This form should be complete to Section E when it is received by the meat inspector who is to examine the product. The meat inspector is to do the following:

1. Write in the Circuit name and code number and the country code after the name of the country of origin.

2. Check the accuracy of all entries and make necessary corrections.

3. Initial each item that passed.

4. If the entire amount was refused entry or condemned, do not initial amount but enter in Section E the number of pieces or packages and weight of the product rejected, with cause, cause code, and disposition.

5. If part of the product passed and the remainder was refused entry and/or condemned, initial the shipment as usual but enter in Section E the number of pieces or packages and weight of that part which was rejected, the cause, cause code, and disposition.

6. See that disposition shows either refused entry or method of destruction for food purposes.

7. Where product is refused entry or condemned, code the cause of rejection. If there is more than one cause only the principal one should be coded.

Example of items 5 and 6: An import of 2,500 cases of canned corned beef weighing 45,000 pounds with a total of 3 cans rejected, 2 cans (1-1/2 pounds total weight) rejected for puncture and 1 rejected for swelling (3/4 pounds), should be reported in this manner: In Section C, on the line "Canned Meats Beef" (line 11, code 21), will be entered 2,500 cases, 45,000 pounds. In Section E, "Disposition", the inspector initials the entry since part of shipment passed; then he enters "2 cans 1-1/2 pounds puncture (49)" 1 and "1 can-3/4 pound sweller (58) incinerated" in the Cause and Disposition section.

In Section C no space is provided for write-in products because there should not be any. If the importer makes a write-in entry, the meat inspector should enter the item in its proper place. Following are two lists of products which should give an idea of products to be included under Canned Other and General Miscellaneous:

#### Canned Other

Goulash	Beef Extract (if canned)
Ham Spread and Cheese	Pate
Luncheon Meat	Pate de foie
Meat Balls	Liver Paste
Meat Spreads	Stews
Meat Samples	Sausage (if canned)
Corned Mutton	

#### General Miscellaneous

Edible Bones	Blood Pudding
Chitterlings	Rinds
Beef Extract	Spleens
Goat Meat	Sweetbreads
Cooked or Cured Mutton	Tripe
Pigskins	Edible Fats & Oils

#### Code for Countries of Origin

Argentina-----02	Ireland (Eire)-----30
Australia-----04	Italy-----32
Austria-----05	Japan-----21
Belgium-----06	Luxemburg-----31
Brazil-----08	Mexico -----34
Canada-----10	Netherlands (Holland)-----26
Costa Rica-----12	New Zealand-----38
Czechoslovakia----16	Nicaragua-----35
Denmark-----18	Northern Ireland-----37
Dominican Republic-20	Norway-----36
England and Wales--22	Panama-----39
Finland-----23	Paraguay-----40
France-----24	Poland-----42
Germany-----25	Scotland-----41
Guatemala-----29	Spain-----43



Haiti-----	33	Sweden-----	44
Holland (Nether-		Switzerland-----	46
lands)-----	26	Uruguay-----	48
Honduras-----	27	Venezuela-----	49
Iceland-----	28	Yugoslavia-----	52

Code for Refused Entry or Condemnation

Artificially Colored-----	01	Nail Hole or Puncture-----	49
Bruises-----	03	Not Properly Labeled-----	50
Contaminated-----	05	Not Thoroughly Cooked-----	19
Crushed-----	41	Not Thoroughly Dried-----	21
Cut Can-----	40	Overstuffed-----	52
Damaged-----	07	Parasitic Infection-----	23
Dirty-----	09	Putrid-----	25
Discolored-----	11	Rancid-----	27
Excess Nitrite-----	13	Short Vacuum-----	54
Excess Water-----	42	Smeary-----	29
Flippers-----	44	Suspicious-----	56
Leakers-----	46	Swellers-----	58
Loose Tin-----	48	Tainted-----	60
Moldy-----	15	Unsound-----	62
Musty Odor-----	17	Miscellaneous-----	99

C. Copies of Form MI-410 should be distributed as follows:

1. Port of Entry Inspection:

Part 6 to Customs Office.

Part 5 to Customs Officer on dock. (Parts 5 and 6 are used only when a temporary transfer is to be made. Distribution is to be made by applicant after being signed by both Meat Inspector and Customs Officer).

Part 1 to 4 to Meat Inspector making inspection who will make the following distribution:

Part 4 to the applicant.

Part 3 to Customs Office for release of bond.

Part 2 to Meat Inspection Office, Chicago, Illinois, with foreign import certificate. Part 1 is Circuit copy.

2. Destination Inspection:

Part 6 remains at the port of entry.

Part 5 to Director of Processed Meat Inspection Division, U. S. Department of Agriculture, Washington, D. C. 20250.

Part 4 to point of inspection with shipment.

Parts 1, 2, and 3 mailed to point of inspection by whoever signs Section D. Meat Inspector who makes inspection will make the following distribution.

Part 3 to Director of Customs at point of entry for release of bond.

Part 2 to Meat Inspection Office, Chicago, Illinois, with foreign import certificate. Part 1 is Circuit copy.

327.37

A. The form and substance of the meat inspection certificates of the following foreign countries have been approved as conforming to requirements of Sections 327.6(e) and (f) of the Meat Inspection Regulations. Such certificates are acceptable to cover importations of meat and meat food products from these countries regardless of whose signature appears on the certificates. Unless otherwise indicated, the certificates comply with Section 327.6(e):

Argentina	Iceland
Australia	Ireland (Eire)
Austria	Italy
Belgium	Japan
Brazil	Mexico
Canada	Netherlands
Costa Rica	New Zealand
Czechoslovakia	Nicaragua
Denmark	Northern Ireland
Dominican Republic	Norway
England and Wales	Panama
Finland	Paraguay
France	Poland
Germany	Scotland
(Federal Republic)	Spain
Guatemala	Sweden
Haiti	Uruguay
Honduras	Yugoslavia

The foreign meat inspection certificate should be forwarded to the Chicago office with Part 2 of completed Form MI-410.

B. Meat inspection certificates from Czechoslovakia should be authenticated by an American Consul or Vice Consul to be acceptable. The form of authentication is given below:

-----  
 -----  
 -----

SS: (venue)

I, (name of authenticating officer), (title), duly commissioned and qualified, do hereby certify that (name of officer) signing (name of country) meat inspection certificate, has been declared by competent (name of country) authorities to have been, at the time he signed the annexed certificate, (title of meat inspector), fully competent to sign and assume responsibility for such a certificate.

In Witness Whereof I have hereunto set my hand and affixed the seal of the (title of American mission) at (place) this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

(Signature of officer)  
(Official title of officer)

\* \* \* \* \*  
\* \* \* \* \*  
\* \* \* \* \*

Service No. \_\_\_\_\_  
Item No. 38, no fee

C. The type of authentication to be used on official meat inspection certificates from Poland follows. It will be imprinted on the certificate by means of a rubber stamp.

PEOPLE'S REPUBLIC OF POLAND, )  
CITY OF WARSAW, ) SS:  
EMBASSY OF THE UNITED STATES OF AMERICA )

I, the undersigned Consular Officer of the United States of America at Warsaw, Poland, duly commissioned and qualified, do hereby certify that the Polish Veterinary Official who signed the annexed certificate, has been declared by the competent Polish authorities to have been, at the time said official signed the certificate, fully competent to perform this act and assume responsibility therefor. IN WITNESS WHEREOF I have hereunto set my hand and affixed the seal of my office this day . . . . .  
. . . . .

. . . . .  
Consul of the United States of  
America

Seal  
Service No. ....  
Tariff Item No. 36  
Gratis.

327.38 Facsimiles of approved foreign meat inspection certificates follow:



## ARGENTINA

R E P U B L I C A



A R G E N T I N A

SECRETARIA DE ESTADO DE AGRICULTURA Y GANADERIA

DIRECCION GENERAL DE SANIDAD ANIMAL

## EXPORTACION A LOS ESTADOS UNIDOS DE NORTE AMERICA

CERTIFICADO DE INSPECCION DE CARNES Y SUS DERIVADOS COMESTIBLES

(1) .....

CERTIFICADO

Nº .....

*Se certifica por el presente, que la carne y derivados comestibles de la misma, detallados en este certificado, proceden de animales (2) ..... que han sido sometidos a inspección sanitaria veterinaria nacional, antes, durante y después de faenadas y que dicha carne y derivados alimenticios han sido encontrados en perfectas condiciones higiénicas y buenas en absoluto para el consumo humano. Se certifica también que no contienen ni han sido tratados con ningún preservativo, materia colorante, ni otra substancia alguna prohibida por las reglamentaciones vigentes de la Inspección de Carnes del Ministerio de Agricultura de los Estados Unidos de Norte América.*

## MARCAS DE IDENTIFICACION EN LAS CARNES O LOS BULTOS

Remitente .....

Procedencia ..... CERTIFICADO Nº .....

Vapor ..... Destino .....

Consignatario .....

Marcas de embarque .....

## DETALLE DEL CARGAMENTO

(2) .....

(1)

(1) Lugar y fecha en letras.

(2) Especie de ganado.

(1) Firma del funcionario nacional autorizado.

(2) Sello de la Dirección General de Sanidad Animal.







## AUSTRIA



Bundesrepublik Österreich

# Amtliches Fleischuntersuchungszertifikat für Schweinefleisch und Schweinefleischprodukte

(Für den Versand nach den USA von Waren, die Muskelgewebe des Schweines (enthalten) und im allgemeinen ohne vorheriges Kochen verzehrt werden.)

(Par. 27.6 (f) of the Meat Inspection Regulations of the United States.)

Ort: \_\_\_\_\_, Datum: \_\_\_\_\_  
(Stadt) (Land)

Ich bescheinige, daß die Ware, die unten angeführt ist, im allgemeinen ohne vorheriges Kochen verzehrt wird und Muskelgewebe des Schweines enthält. Die Ware wurde in frischem oder in frischgepökeltem Zustande wenigstens zwanzig Tage lang einer Temperatur von höchstens 5° F ausgesetzt oder in Übereinstimmung mit einer Anweisung des Leiters der amerikanischen Fleischbeschauabteilung behandelt; diese Ware enthält keine Schweinemuskelgewebe, die nicht wie beschrieben behandelt wurden.

Art des Produktes:

Zahl der Stücke und Kolli:

Gewicht:

Identifizierungsmarkierungen  
auf dem Fleisch und den Kolli:

Verfrächter: \_\_\_\_\_

Adresse: \_\_\_\_\_

Empfänger: \_\_\_\_\_

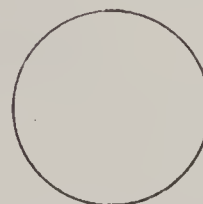
Bestimmungsort: \_\_\_\_\_

Versandmarkierungen: \_\_\_\_\_

(Unterschrift)

(Name des Beamten der österreichischen Regierung, der berechtigt ist, Untersuchungszeugnisse auszuhandeln für Fleisch und Fleischprodukte, die für den Export nach den USA bestimmt sind.)

(Amtlicher Titel)



(Dienstsiegel des mit der  
Überwachung beauf-  
tragten Amtstierarztes)

**Anmerkung:** Obiges Zertifikat wird für jede Konsignation verlangt, die aus Produkten besteht, die gewöhnlich ohne vorheriges Kochen verzehrt werden (z. B. Cervelatwurst, italienischer oder westfälischer Schinken u. dgl.) und die Schweinemuskelgewebe enthalten. Dieses Zertifikat muß von dem Empfänger oder dessen Agenten der Fleischbeschauabteilung am Untersuchungsort in den USA übergeben werden.

## BELGIUM

Kingdom



of Belgium

MINISTRY OF PUBLIC HEALTH

VETERINARY SERVICES

# Official Meat Inspection Certificate

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine or goats which received ante-mortem and post-mortem veterinary inspection at the time of slaughter and that such meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter, or other substance not permitted by the regulations of the United States Secretary of Agriculture governing meat inspection, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country.

Kind of product: ..... Number of pieces and packages: ..... Weight: .....  
Identification marks on meats and packages :

Consignor : .....

Address : .....

Consignee : .....

Destination : .....

Shipping marks : .....



*Veterinary surgeon appointed  
by the Government*

(s.)

Kingdom



of Belgium

MINISTRY OF PUBLIC HEALTH

VETERINARY SERVICES

# Official Meat Inspection Certificate

for pork and pork products

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which when fresh or freshly cured in salt, were subjected to a temperature not higher than 5° F. for not less than 20 days or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified.

Kind of product .....

Number of pieces and packages .....

Weight .....

Identification marks on meat and packages :

Consignor .....

Address .....

Consignee .....

Destination .....

Shipping marks .....



Veterinary surgeon appointed  
by the Government

(s.)





CANADA  
DEPARTMENT OF AGRICULTURE  
HEALTH OF ANIMALS BRANCH—MEAT INSPECTION DIVISION

SCHEDULE B, FORM 2

No. 572782

EST. \_\_\_\_\_  
NO. \_\_\_\_\_ PLACE \_\_\_\_\_ DATE \_\_\_\_\_

KIND OF PRODUCT	NO. OF PIECES OR PACKAGES	NET WEIGHT

**SIGNATURE OF OFFICER OR AGENT OR CARRIER MAKING INDORSEMENT**

257

## CANADA

Form 3



CANADA

Schedule G

CANADA

DEPARTMENT OF AGRICULTURE

PRODUCTION AND MARKETING BRANCH HEALTH OF ANIMALS DIVISION

## MEAT INSPECTION

Place ..... Date .....

Est. No. ....

Official Meat Inspection certificate for Pork and Pork Products, for shipment to the United States, of articles, or articles of a kind prepared customarily to be eaten without further cooking, which contain muscle tissues.

COPY

I hereby certify that the article or articles herein described are of a kind prepared to be eaten without further cooking, and contain muscle tissues of pork that when fresh, and freshly cured in salt, were subjected to a temperature not higher than 5°F. for not less than twenty days or otherwise treated as specified by the Director of the Meat Inspection Division, Agricultural Research Service, United States Department of Agriculture, and that said article contains no muscle or tissues of pork which has not been treated as herein specified.

KIND OF PRODUCT	No. of PIECES OR PACKAGES	NET WEIGHT

Identification Marks on Meats and Packages .....

COPY

Consignor ..... Address .....

Consignee ..... Destination .....

Shipping Marks (Name of vessels, railway or express) .....

Shipment supervised by .....  
(Veterinary Inspector under the Meat Inspection Act)

PHA 31  
26477-FPM—360



COSTA RICA



Nº 2051

Fórm. - MAG - 042 - 1961 - 5000

Perm. Exp. No. \_\_\_\_\_

REPUBLICA DE COSTA RICA  
MINISTERIO DE AGRICULTURA Y GANADERIA  
DIRECCION GENERAL DE AGRICULTURA Y GANADERIA

CERTIFICADO OFICIAL DE INSPECCION DE CARNES

Lugar \_\_\_\_\_  
(Place)

Fecha \_\_\_\_\_  
(Date)

Se certifica por el presente, que la carne o producto comestible de carne aquí descrito, derivan de animales que recibieron inspección veterinaria ante-mortem y post-mortem al tiempo de sacrificarse; y que dicha carne y producto comestible de carne son buenos, sanos y apropiados para el consumo humano; y que no han sido tratados ni contienen ningún preservativo, sustancias colorantes u otras sustancias prohibidas por el Acuerdo de la Reglamentación para la Industrialización Sanitaria de la Carne; y que han sido manipulados en forma sanitaria en este país.

This is to certify that the meat or meat food products here in described were derived from animals which received ante-mortem and post-mortem veterinary inspection at the time of slaughter, and that said meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with and do not contain any preservative, coloring matter, or other substance not permitted by the Meat and Canned Foods Decrees and Regulations, and have been handled only in a sanitary manner in this country.

ARTICULOS (KIND OF PRODUCT)	NUMERO DE PIEZAS O BULTOS (NUMBER OF PIECES OR PACKAGES)	PESO (WEIGHT)

Marcas de Identificación de la Carne y Bultos \_\_\_\_\_  
(Identification Marks on Meats and Packages)

Vapor \_\_\_\_\_  
(Steamer S. S.)

Embarcador \_\_\_\_\_  
(Consigner)

Dirección \_\_\_\_\_  
(Address)

Consignatarios \_\_\_\_\_  
(Consignee)

Destino \_\_\_\_\_  
(Destination)

Marcas de Embarque \_\_\_\_\_  
(Shipping Marks)

Médico Veterinario  
Autorizado por el Ministerio de Agricultura y Ganadería  
D. V. M. Authorized by the Secretary of Agriculture

## CZECHOSLOVAKIA



REPUBLIKA ČESKOSLOVENSKÁ

## Úřední potvrzení o prohlídce masa.

Místo \_\_\_\_\_ Československo, Datum \_\_\_\_\_ 19 \_\_\_\_\_

Potvrzuji tímto, že maso a výrobky z masa, zde popsané, pocházejí ze skotu, ovčí, vepřů neb koz, které byly před i po porážce veterinářem prohlédnuty a že toto maso nebo tyto výrobky z masa jsou zdravé, zdravotně bezzávadné, zdraví prospěšné a i jinak způsobilé k lidské výživě, dále že nebyly upravovány konzervovadly a barvivy a že neobsahují těchto látek ani jiných, které nejsou dovoleny předpisy o kontrole masa, vydanými Departmentem zemědělství Spojených Států Severoamerických, a konečně, že tímto masem anebo výrobky z masa bylo v Československu nakládáno jen způsobem zdravotně nezávadným.

Druh zboží	Počet kusů nebo zátek	Váha

Označení totožnosti na masě a obalech: \_\_\_\_\_

Jméno a adresa dodavatele: \_\_\_\_\_

Jméno a adresa příjemce: \_\_\_\_\_

Značky dopravní: \_\_\_\_\_

Úřední razítka.

(Podpis a hodnost veterináře prohlídkou pověřeného.)

## CZECHOSLOVAKIA



REPUBLIKA CESHOSLOVENSKÁ.

## Úřední potvrzení o prohlídce vepřového masa a výrobků z něho.

Místo..... Československo. Datum..... 19.....

\* Potvrzuji tímto, že zboží zde popsané, jest toho druhu, jak bývá upravováno k jídlu bez vaření, že obsahuje vepřové maso, které bylo v čerstvém nebo čerstvě nasoleném stavu chováno po dobu ne kratší než 20 dnů při teplotě ne vyšší než 5° Fahrenheita ( $-15^{\circ}\text{C}$ ), nebo s nímž bylo jinak nakládáno tak, jak předepsáno přednostou Bureau of Animal Industry Spojených Států Severoamerických, a že toto zboží neobsahuje vepřové maso, kterým by bylo naloženo jiným způsobem, než jak je zde uvedeno.

Druh zboží	Počet kusů nebo zášek	Váha

Označení totožnosti na masě a obalech:.....

Jméno a adresa dodavatele:.....

Jméno a adresa příjemce:.....

Značky dopravní:.....

Úřední razítka.

(Podpis a hodnost veterináře prohlídkou pověřeného.)

**Poznámka:** Toto úřední potvrzení musí provázeti každou zášeku vepřového masa a výrobků, připravených k jídlu bez dodatečného vaření (uzenina, „steak“ a „Westphalia“ šunka a pod.). Toto úřední potvrzení musí být předloženo příjemcem nebo jeho zástupcem inspektoru Departmentu zemědělství při prohlídce ve Spojených Státech.

Čís. 41: 416.  
Základní vydání v Praze 4086 - 1936.



## DENMARK



## KINGDOM OF DENMARK

*Ministry of Agriculture*

Veterinary Department

**Official meat-inspection certificate.**City:  
(By), DENMARK  
(DANMARK)Date:  
(Dato)

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine, or goats which received ante-mortem and post-mortem veterinary inspections at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome, and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter, or other substance not permitted by the regulations governing the meat inspection of the Danish Ministry of Agriculture, and that said meat and meat food products have been handled only in a sanitary manner in this country.

(Jeg attesterer herved, at nedenfor beskrevne kød og kødprodukter stammer fra kvæg, får, svin eller geder, som blev underkastet veterinærkontrol umiddelbart før og umiddelbart efter slagtningen, og at nævnte kød og kødprodukter er sunde og tjenlige til menneskeføde og ikke er behandlet med eller indeholder noget konserveringsstof, farvestof eller andet stof, som ikke er tilladt i de af det danske landbrugsministerium fastsatte bestemmelser om kødkontrol, samt at nævnte kød og kødprodukter her i landet udelukkende er behandlet på en hygiejnisk måde.)

Kind of product:  
(Varens art)Number of pieces or packages:  
(Antal colli)Gross-weight:  
(Bruttovægt)Net-weight:  
(Nettovægt)Identification marks on meats and packages:  
(Veterinære kontrolmærker på kød og emballage)Consignor:  
(Afsender)Address:  
(Adresse)Consignee:  
(Modtager)Destination:  
(Bestemmelsessted)Shipping marks:  
(Afsenderens fragtmærker)

Veterinary surgeon authorized by the Ministry of Agriculture.  
(Dyrlæge autoriseret af landbrugsministeriet)

## DENMARK



## KINGDOM OF DENMARK

*Ministry of Agriculture*

## Veterinary Department

**Official meat-inspection certificate for pork and pork products**

(For shipment to the United States of articles of a kind prepared customarily to be eaten without cooking, which contain muscle tissue of pork).

(For forsendelse til U. S. A. af varer af en art, således tilberedte, at de sædvanligvis spises uden forudgående kogning eller stegning, og som indeholder muskeltvæv af svin).

City:  
(By)

, DENMARK  
(DANMARK)

Date:  
(Dato)

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than 5° F. for not less than 20 days, or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified.

(Jeg attesterer herved, at varen eller varerne beskrevet heri er af en art, således tilberedt, at de sædvanligvis spises uden forudgående kogning eller stegning, og indeholder muskeltvæv af svin, som i fersk eller let saltet tilstand blev underkastet en temperatur ikke højere end 5° F (÷ 15° C) i ikke mindre end 20 dage, eller behandlet på anden måde, som foreskrevet af the Chief of the Bureau of Animal Industry, og at nævnte varer ikke indeholder noget muskeltvæv af svin, der ikke er blevet behandlet efter nævnte forskrifter).

Kind of product:  
(Varens art)

Number of pieces or packages:  
(Antal colli)

Gross-Weight:  
(Bruttovægt)

Net-Weight:  
(Nettovægt)

Identification marks on meats and packages:  
(Veterinære kontrolmærker på kød og emballage)

Consignor:  
(Afsender)

Address:  
(Adresse)

Consignee:  
(Modtager)

Destination:  
(Bestemmelsessted)

Shipping marks:  
(Afsenderens fragtmærker)

Veterinary surgeon authorized by the Ministry of Agriculture.  
(Dyrlæge autoriseret af landbrugministeriet).

## DOMINICAN REPUBLIC

FORM, B-41

 REPUBLICA DOMINICANA  
 SECRETARIA DE ESTADO DE SALUD Y PREVISION SOCIAL

 CERTIFICADO OFICIAL DE INSPECCION DE CARNE  
 Y PRODUCTOS DERIVADOS, PARA LA EXPORTACION.

Núm. ....

 Ciudad Trujillo,  
 Distrito Nacional, Rep. Dom.

FECHA .....

CERTIFICO: Que las carnes y productos alimenticios de carnes aquí descritos, proceden de reses, carneros, cerdos o cabras que recibieron al tiempo del sacrificio inspecciones veterinarias ante-morten y post-morten; que dichas carnes y productos son sanos, saludables y apropiados para la alimentación humana; que no han sido tratados con, ni contienen ningún preservativo, materia colorante u otras sustancias no permitidas por el Reglamento oficial de la Secretaría de Estado de Salud y Previsión Social, de la República Dominicana, que rige la inspección de carnes; y que dichas carnes y productos han sido manipulados de manera sanitaria en este país.

Clase de producto.	Número de piezas o paquetes	Peso.
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Señales de identificación en carnes y paquetes .....

Embarcador ..... Dirección .....

Consignatario ..... Destino .....

Marcas de embarque .....

Firma .....

Nombre .....

 Médico Veterinario de la Secretaría  
 de Estado de Salud y Previsión  
 Social.

Imp. Melano, C. I. 4573 / 1-0



DOMINICAN REPUBLIC

REPÚBLICA DOMINICANA  
SECRETARIA DE ESTADO DE SALUD Y PREVISION SOCIAL

CERTIFICADO OFICIAL DE INSPECCION PARA CERDO  
Y PRODUCTOS DE CERDO.

Núm. ....

Ciudad Trujillo,  
Distrito Nacional, Rep. Dom.

FECHA .....

CERTIFICO: que el articulo o los articulos aquí descritos han sido prepara-  
dos para comerse crudos, esto es, sin cocinarse y que contienen carne de  
cerdo que, cuando es curada en sal o cuando es fresca, fué sometida a una  
temperatura no mayor de cinco (5) grados F. durante no menos de veinte (20)  
días, o de otra manera tratada de acuerdo a lo especificado por el Director  
de la División de Inspección de Carne y que estos articulos no contienen  
carne de cerdo que no haya sido tratada según se especifica aquí.

<u>Clase de Producto</u>	<u>Número de Piezas o Paquetes</u>	<u>Peso</u>
.....	.....	.....
.....	.....	.....
.....	.....	.....

Marcas de identificación de carne o paquetes .....

Consignador .....

Dirección .....

Consignatario .....

Puerto de descarga .....

Marcas .....

Firma .....

Oficial Autorizado a Expedir Certificados  
para Carne y Productos de carne a ser exportados  
a los Estados Unidos de América.

Título Oficial .....

## ENGLAND AND WALES

FORM A

ENGLAND AND WALES  
MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

INSPECTION CERTIFICATE for use in connection with the  
EXPORT OF MEAT AND MEAT PRODUCTS TO U.S.A.

Place .....

Date .....

I HEREBY CERTIFY that the meat\*/meat food products\* described overleaf was/were derived from animals which received ante and post-mortem veterinary inspection at the time of slaughter and is/are sound, wholesome and fit for human consumption, and has/have not been treated with and does/do not contain any prohibited preservative or colouring matter, and that the said meat\*/meat products\* has/have been handled only in a hygienic manner in this country.

Official Certificate  
authorised by  
the Ministry of  
Agriculture, Fisheries  
and Food.

Signature.....  
Certifying Officer

Official Title .....

\* Delete when not applicable.

P.T.O.

DescriptionNo. of PackageWeight

**REVERSE**

Identification Marks.....

Name and address of Consignor .....

Name and address of Consignee .....

Conveyed by (Shipping Marks) .....

## FINLAND

V:o \_\_\_\_\_

Kinnocementtilla liijettävä todistaa.  
Intyg att bifogas kinnocementet.SUOMEN  
TASAVALTAREPUBLIKEN  
FINLANDMAATALOUSMINISTERIO — LANTBRUKSMINISTERIET  
ELÄINLÄÄKINTOOSASTO — VETERINÄRAVDELNINGEN

## Lihantarkastustodistus. — Köttkontrollintyg.

\_\_\_\_\_ päivänä \_\_\_\_\_ kuuta 19\_\_\_\_  
 (paikka)  
 \_\_\_\_\_ 19\_\_\_\_  
 (ort) (nå)

Täten todistetaan, että allamainittu liha tai allamainitut lihatuotteet on saatu  
 Härmed intygas, att nedannämnt kött eller nedannämnda köttprodukter erhållits  
 eläinlääkäriin sekä ennen teurastusta että sen jälkeen tarkastamista eläimistä ja että  
 från djur, som undersökts av veterinär såväl före som efter slaktningen och att  $\frac{det}{de}$  i  
 $\frac{se}{ne}$  on hyväksytty voimassaolevan lihan tarkastuslain mukaisessa järjestyksessä ihmisen  
 den ordning gällande köttkontrolllag föreskriver, godkänts att såsom tjänlig  $\frac{t}{a}$  till mäns  
 ravinnoksi kolvollisena maasta vietäväksi,  
 niskoföda utföras ur landet.

Tavaran laji Varuslag	Kollien lukumäärä Antalet köllen	Paino Vikt

Lihan ja päällysten tunnusmerkit:

Köttets och emballagens kännetecken:

Lähetäjä:

Avsändare:

Vastaanottaja:

Emottagare:

Lähetämistapa:

Transportsätt:

Osoite:

Adress:

Määräpaikka:

Destinationsort:

(Läivon nimi y.m.)  
(Fartygets namn m.m.)Lihantarkastaja tai teurastuslaitoksen valtuutettu.  
Köttkontrollör eller köttförordningsmyndig befädd.



## FRANCE

(FACE)

RÉPUBLIQUE FRANÇAISE

MINISTÈRE DE L'AGRICULTURE

## CERTIFICAT DU SERVICE OFFICIEL DE L'INSPECTION DES VIANDES

Lieu : \_\_\_\_\_ Date : \_\_\_\_\_  
(ville) (pays)

Je certifie par la présente que la viande et les produits d'alimentation carnée décrits ci-dessous au verso proviennent d'animaux des espèces bovine, ovine, porcine ou caprine qui ont été soumis « ante-mortem » et « post-mortem » à des inspections du service vétérinaire au moment de l'abatage, que cette viande et ces produits d'alimentation carnée sont parfaitement sains et irréprochables au point de vue hygiénique et à tous autres égards propres à la consommation humaine, qu'ils ne renferment et n'ont été traités avec aucune matière conservatrice ou colorante ou autre substance non autorisée par les règlements relatifs à l'inspection des viandes sous le contrôle du Ministère de l'Agriculture des États-Unis d'Amérique, règlements enregistrés à mon service, et que ladite viande et lesdits produits d'alimentation carnée n'ont été manipulés dans ce pays qu'avec toutes les précautions sanitaires désirables.

FRANCE

(REVERSE)

NATURE DU PRODUIT	NOMBRE DE MORCEAUX ou de colis	POIDS

Marques d'identification sur les viandes et les colis :

Expéditeur : Adresse

Destinataire : Lieu de destination :

Marques d'expédition :

Signature :

Vétérinaire Inspecteur agréé par le Ministère  
de l'Agriculture de la République Française

Contrescoring du  
Directeur Départemental des  
Services Vétérinaires

GERMANY (FEDERAL REPUBLIC)

Ausländisches amtliches Fleischuntersuchungs-Zertifikat

Ort (Stadt) (Land) Datum

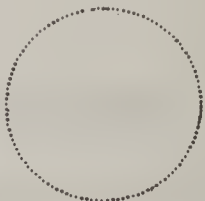
Ich bescheinige, daß das unten beschriebene Fleisch und Fleischprodukt vom Rind, Schaf, Schwein oder Ziege stammt. Die Tiere wurden einer amtlichen Schlachtvieh- und Fleischschau unterzogen. Das Fleisch und die Fleischprodukte sind fehlerfrei, gesund, bekömmlich und für den menschlichen Genuß geeignet. Sie enthalten keine Konservierungsmittel, Farben oder sonstige Substanzen, die laut Verfügung der Fleischschauabteilung des amerikanischen Landwirtschaftsministeriums, die in meinem Besitz ist, verboten sind. Das Fleisch und die Fleischprodukte sind in diesem Land nur hygienisch einwandfrei behandelt worden.

Art des Produktes	Zahl der Stücke oder Kolli	Gewicht

Identifizierungsmarkierungen auf dem Fleisch und den Kolli



Verfrachter  
Adresse  
Empfänger  
Bestimmungsort  
Versandmarkierungen  
(Unterschrift)  
(Name des Beamten der ausländischen Regierung, der berechtigt ist, Untersuchungszertifikate auszufertigen für Fleisch und Fleischprodukte, die für den Export nach den USA bestimmt sind.)  
(Amtlicher Titel)



Dienstiegel des mit der Überwachung beauftragten beamteten Tierarztes.

Amtliches Fleischuntersuchungs-Zertifikat für Schweinefleisch und Schweinefleischprodukte  
(Für den Versand nach den USA von Waren, die Muskelgewebe des Schweines enthalten und die im allgemeinen ohne vorheriges Kochen verzehrt werden.)

Ort Datum 196

Ich bescheinige, daß die Ware, die unten angeführt ist, im allgemeinen ohne vorheriges Kochen verzehrt wird und Muskelgewebe des Schweines enthält. Die Ware wurde in frischem oder frischgepökeltem Zustand wenigstens zwanzig Tage lang einer Temperatur von höchstens 5° F ausgesetzt oder in Übereinstimmung mit einer Anweisung des Leiters der amerikanischen Fleischschauabteilung behandelt. Diese Ware enthält keine Schweinemuskelgewebe, die nicht wie beschrieben behandelt worden sind.

Art des Produktes	Zahl der Stücke oder Kolli	Gewicht

Identifizierungsmarkierungen auf dem Fleisch und den Kolli



Verfrachter  
Adresse  
Empfänger  
Bestimmungsort  
Versandmarkierungen  
(Unterschrift)  
(Name des Beamten der ausländischen Regierung, der berechtigt ist, Untersuchungszertifikate auszufertigen für Fleisch und Fleischprodukte, die für den Export nach den USA bestimmt sind.)  
(Amtlicher Titel)



Dienstiegel des mit der Überwachung beauftragten beamteten Tierarztes.

Anmerkung: Obiges Zertifikat wird für jede Konsignation verlangt, die aus Produkten besteht, die gewöhnlich ohne vorheriges Kochen verzehrt werden (z. B. Cervelatwurst, Italienischer oder Westfälischer Schinken und dergl.) und die Schweinemuskelgewebe enthalten. Dieses Zertifikat muß von dem Empfänger oder dessen Agenten der Fleischschauabteilung am Untersuchungsart in den USA übergeben werden.



GUATEMALA



Nº 006

Perm. Exp. No. \_\_\_\_\_

REPUBLICA DE GUATEMALA

Ministerio de Salud Pública y Asistencia Social

DIRECCION GENERAL DE SANIDAD

CERTIFICADO OFICIAL DE INSPECCION DE CARNES

FOREIGN OFFICIAL MEAT-INSPECTION, CERTIFICATE

Lugar \_\_\_\_\_  
(PLACE)

Fecha \_\_\_\_\_  
(DATE)

Yo certifico por el presente, que la carne o producto comestible de carne aquí descrito, derivan de animales que recibieron inspección veterinaria ante-mortem y post-mortem al tiempo de sacrificarse; y que dicha carne y producto comestible de carne son buenos, sanos y apropiados para el consumo humano; y que no han sido tratados ni contienen ningún preservativo, sustancias colorantes u otras sustancias no permitidas por el Departamento de Agricultura de los Estados Unidos; y que han sido manipulados estrictamente en forma sanitaria en este país.

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine, and goats which received ante-mortem and post-mortem veterinary inspections at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome, and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter or other substance not permitted by the regulations governing the meat inspection of the United States Department of Agriculture, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country.

ARTICULOS (Kind of Product)	NUMERO DE PIEZAS O BULTOS (Number or pieces or packages)	PESO (Weight)

Marcas de Identificación de la Carne y Bultos \_\_\_\_\_  
-IDENTIFICATION MARKS ON MEAT PACKAGES-

Vapor \_\_\_\_\_  
-STEAMER S. S.-

Embarcador \_\_\_\_\_  
-CONSIGNOR-

Dirección \_\_\_\_\_  
-ADDRESS-

Consignatarios \_\_\_\_\_  
-CONSIGNEE-

Destino \_\_\_\_\_  
-DESTINATION-

Marcas de Embarque \_\_\_\_\_  
-SHIPPING MARKS-



MEDICO VETERINARIO  
AUTORIZADO POR EL MINISTERIO DE SALUD PUBLICA Y ASISTENCIA SOCIAL  
D. V. M. AUTHORIZED BY THE MINISTRY OF PUBLIC HEALTH AND SOCIAL WELFARE

## HAITI



REPUBLIQUE D'HAITI

DEPARTEMENT DE LA SANTE PUBLIQUE ET DE LA POPULATION

**CERTIFICAT DU SERVICE OFFICIEL  
DE L'INSPECTION DES VIANDES**

 Lieu.....  
(Place)

 Date.....  
(Date)

Par la présente je certifie que la viande ou les produits d'alimentation à base de viande ci-dessous décrits viennent de bestiaux, moutons, porcs ou chèvres qui ont été soumis à une inspection vétérinaire avant et après l'abattage et que cette viande et ces produits alimentaires à base de viande sont sains, salubres, en bon état et propres à l'alimentation humaine qu'ils n'ont pas été traités à l'aide de et qu'ils ne contiennent aucun préservatif, matière colorante ou autre substance non permis par les règlements du Département de la Santé Publique d'Haïti ayant trait à l'inspection de la viande, qu'ils ont été enregistrés en ma présence et que la dite viande et les dits produits alimentaires à base de viande ont été traités selon les règlements sanitaires en vigueur dans ce pays.

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine, or goats which received antemortem and postmortem veterinary inspection at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome, and otherwise fit for human food, and have not been treated with, and do not contain any preservative, coloring matter, or other substance not permitted by the regulations governing the meat inspection of Haiti's Direction of Public Hygiene, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country.

ARTICLE (Kind of product)	NOMBRE DE PIÈCES OU PACKETS (Number of pieces or packages)	POIDS (Weight)

 Marque d'Identification sur la viande et les packets.....  
(Identification Marks on Meats and Packages)

Via : .....

 Consignataire..... Adresse.....  
(Consigner) (Address)

 Destinataire..... Destination.....  
(Consignee) (Destination)

 Marques d'expédition.....  
(Shipping Marks)

(35415)

 .....  
Vétérinaire Inspecteur  
agré par le Ministère de la Santé Publique  
, et de la Population



Nº 0750

REPUBLICA DE HONDURAS. C. A.  
SECRETARIA DE ESTADO EN EL DESPACHO DE RECURSOS NATURALES

**CERTIFICADO OFICIAL DE INSPECCION DE CARNES**

Lugar \_\_\_\_\_  
(Place)

Fecha \_\_\_\_\_  
(Date)

Se certifica por el presente, que la carne o producto comestible de carne aquí descrito, derivan de animales que recibieron inspección veterinaria ante-mortem y post-mortem al tiempo de sacrificarse; y que dicha carne y producto comestible de carne son buenos, sanos y apropiados para el consumo humano; y que no han sido tratados ni contienen ningún preservativo, sustancias colorantes u otras sustancias prohibidas por la Ley y Reglamento para la Industrialización Sanitaria de la Carne de Honduras; y que han sido manipulados en forma sanitaria en este país

This is certify that the meat or meat food products here in described were derived from animals which received ante-mortem and post-mortem veterinary inspection at the time of slaughter, and that said meat and meat food products are sound, healthful, wholesome and ohterwise fit for human food, and have not been treated with and do not contain any preservative, coloring matter, or other substance not permitted by the Meat Inspection Act and Regulations of Honduras, and have been handled only in a sanitary manner in this country.

12 B. XII-66 Imp. Honduras

ARTICULOS (KING OF PRODUCTS)	ORIGEN (ORIGEN)	NUMERO DE PIEZAS O BULTOS (NUMBER OF PIECES OR PACKAGES)	PESO (WEIGHT)

Marcas de Identificación de la Carne y Bultos \_\_\_\_\_  
(Identification Marks on Meats and Packages)

\_\_\_\_\_

Via \_\_\_\_\_

Embarcador \_\_\_\_\_  
(Consigner)

Dirección \_\_\_\_\_  
(Address)

Consignatarios \_\_\_\_\_  
(Consignee)

Dirección \_\_\_\_\_  
(Address)

Destino \_\_\_\_\_  
(Destination)

Marcas de Embarque \_\_\_\_\_  
(Shipping Marks)

MEDICO VETERINARIO  
Autorizado por el Ministerio de Recursos Naturales  
(Veterinary Inspector authorized by the Secretary of Natural Recources)



## ICELAND



REPUBLIC OF ICELAND  
DEPARTMENT OF AGRICULTURE

## OFFICIAL MEAT-INSPECTION CERTIFICATE

....., Iceland.

, 19

I HEREBY certify that the meat <sup>and</sup> <sub>or</sub> meat food-products hereunder described <sup>was</sup> <sub>were</sub> derived from animals subjected to ante- and post-mortem veterinary inspection at the time of slaughter and found to be free from disease and suitable in every way for human consumption, and that <sup>it has not</sup> <sub>they have not</sub> been treated with chemical preservatives or other foreign substances injurious to health.

Kind of product	Number of Parcels	Brand or mark	Where slaughtered	Consignor	Consignee

Signature. ....

Government Veterinarian

94021111

IRELAND



DEPARTMENT OF AGRICULTURE, IRELAND.

Meat Inspection Certificate.

Place : ..... Ireland.      Date : .....

I hereby certify that the meat and meat food products described below were derived from cattle, sheep or swine, which received ante-mortem and post-mortem veterinary inspections at the time of slaughter and are sound, healthful, wholesome and otherwise fit for human food and have not been treated with and do not contain any prohibited preservative or colouring matter and that the meat and meat food products have been handled only in a sanitary manner in this country.

Kind of Product	Number of Pieces or Packages	Weight
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Date of Shipment : .....  
Consignor : .....  
    Address : .....  
Consignee : .....  
    Address : .....  
Shipping Marks : .....  
Identification Marks : .....      OFFICIAL INSPECTION STAMP.

(Signature) ..... M R.C.V.S.  
Official Title .....  
Department of Agriculture.

ITALY

MOD. 23

MODULARIO  
Sanità - 86

REPUBBLICA ITALIANA  
MINISTERO DELLA SANITÀ  
SERVIZIO VETERINARIO

Nº 0009014

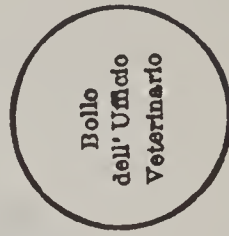
Stabilimento di produzione

INDICAZIONE DEL PRODOTTO CHE SI ESPORTA

Si certifica che la carne o i prodotti di carne a fianco indicati  
spediti da (1) .....  
e diretti a (2) .....  
provengono da animali che, a norma delle disposizioni vigenti nella  
Repubblica, sono stati, prima e dopo la macellazione, sottoposti a visita  
sanitaria e riconosciuti sani; si certifica inoltre che la carne o i prodotti di  
carne suddetti sono stati, a norma delle citate disposizioni, sottoposti  
a visita sanitaria e riconosciuti sani e atti al consumo.



IL VETERINARIO  
DI CONFINO O DI PORTO



- 19.....
- (1) Nome e cognome della persona che spedisce e luogo di origine della merce.
- (2) Nome e cognome del destinatario e luogo di destinazione.



ITALY

Mod. 2846

REPUBBLICA ITALIANA

ALTO COMMISSARIATO PER L'IGIENE E LA SANITA' PUBBLICA

SERVIZIO VETERINARIO

Certificato complementare per la esportazione negli Stati Uniti d'America delle carni e prodotti di carni suine contenenti tessuto muscolare, preparati secondo le abituali regole per essere consumati senza cottura.

N. d'ordine .....

Il sottoscritto dichiara che il prodotto od i prodotti qui sotto specificati sono stati preparati nei modi consueti per essere consumati senza cottura, e che contengono tessuto muscolare di maiale, il quale, allo stato fresco, o dopo recente salatura, è stato mantenuto ad una temperatura non superiore a 5 gradi Fahrenheit per non meno di 20 giorni

Qualità dei prodotti	Num. dei pezzi e dei colli	Peso
.....	.....	.....
.....	.....	.....
.....	.....	.....

Marchio di identificazione apposto sulle carni o sugli imballaggi .....

Speditore ..... Indirizzo .....

Destinatario ..... Destinazione .....

Luogo e data di rilascio del certificato .....



Il Veterinario governativo di confine o di porto



## J A P A N

## MINISTRY OF HEALTH AND WELFARE

## MEAT-INSPECTION CERTIFICATE

No. \_\_\_\_\_

Place \_\_\_\_\_  
(City) (Country)

Date \_\_\_\_\_

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine, or goats which received ante-mortem and post-mortem veterinary inspections at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome, and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter, or other substance not permitted by the regulations governing the meat inspection of the United States Department of Agriculture, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country and the meat products were prepared only in the following approved establishments: \_\_\_\_\_.

Kind of product	Number of pieces or packages	Weight
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Identification Marks on meats and packages \_\_\_\_\_

Consignor \_\_\_\_\_

Address \_\_\_\_\_

Consignee \_\_\_\_\_

Designation \_\_\_\_\_

Shipping marks \_\_\_\_\_

(Signature) \_\_\_\_\_  
 (Name of official of national government authorized to  
 issue inspection certificates for meat and meat food  
 products exported to the United States)  
 (Official title) \_\_\_\_\_

## MEXICO

Forma Núm. 15



Certificado No. \_\_\_\_\_

REPUBLICA MEXICANA  
SECRETARIA DE AGRICULTURA Y GANADERIA  
DIRECCION GENERAL DE GANADERIA

EXPORTACION A: \_\_\_\_\_

**CERTIFICADO**  
**DE INSPECCION DE CARNE Y SUS DERIVADOS COMESTIBLES**

(LUGAR)

(FECHA)

Se certifica que la carne y derivados comestibles de la misma, detallados en este Certificado, proceden de animales que han sido sometidos a inspección sanitaria veterinaria federal, antes, durante y después de sacrificados, en los términos de la Ley de 31 de diciembre de 1949, y que dicha carne y derivados alimenticios han sido encontrados en perfectas condiciones higiénicas y buenos en absoluto para el consumo humano. Se certifica también que no contienen ni han sido tratados con ningún preservativo, materia colorante, ni otras sustancias prohibidas por la Ley antes citada.

MARCAS DE IDENTIFICACION EN LAS CARNES O BULTOS	
Nombre del Establecimiento T.I.F. Productor:	Via:
Número de Registro:	Destino:
Remitente:	Consignatario:
Procedencia:	Marcas de Embarque:
Detalle del Cargamento:	

(Firma del Funcionario Federal autorizado)

(Sello de la Direc. Gral. de Ganadería)



## MEXICO

Forma Num. 21

Certificado



**REPUBLICA MEXICANA**  
**SECRETARIA DE AGRICULTURA Y GANADERIA**  
**DIRECCION GENERAL DE GANADERIA**

EXPORTACION A: \_\_\_\_\_

**CERTIFICADO**

**DE INSPECCION DE CARNE DE CERDO Y SUS DERIVADOS**  
**COMESTIBLES**

(LUGAR)

(FECHA)

Se certifica que el producto o productos comestibles que se detallan en este Certificado están preparados en la forma usual para comerse sin nuevo o ulterior cocimiento y contienen carne de cerdo, la cual, cuando fresca o durante el proceso de curación se sujetó a una temperatura no más alta de menos 15° C. (5° F.), durante un período no menor de 20 días, o bien fueron tratados de acuerdo con lo prescrito por el Jefe de la División de la Inspección Sanitaria de la Carne; certificándose también que no contienen carne de cerdo que haya sido tratada de manera diferente a la especificada anteriormente.

MARCAS DE IDENTIFICACION EN LAS CARNES O BULTOS	
Nombre del Establecimiento T.I.F. Productor:	Via:
Número de Registro:	Destino:
Remitente:	Consignatario:
Procedencia:	Marcas de Embarque:
Detalle del Cargamento:	

(Firma del Funcionario Federal autorizado)

(Sello de la Direc. Genl. de Ganadería)

## NETHERLANDS

16305 \* ORIGINAL

**KINGDOM OF THE NETHERLANDS**  
MINISTRY OF AGRICULTURE AND FISHERIES  
VETERINARY SERVICES

**OFFICIAL MEAT INSPECTION CERTIFICATE OF COUNTRY OF SLAUGHTER**

Place: \_\_\_\_\_ Date: \_\_\_\_\_

I hereby certify that the meat and meat food products herein described were derived from cattle, sheep, swine or goats which received ante-mortem and post-mortem veterinary inspection at the time of slaughter and that such meat and meat food products are sound, healthful, wholesome and otherwise fit for human food and have not been treated with, and do not contain any preservative, coloring matter, or other substance not permitted by the regulations governing the meat inspection of the United States Department of Agriculture, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country.


Kind of product: \_\_\_\_\_ Number of pieces and packages: \_\_\_\_\_ Weight: \_\_\_\_\_

Identification marks on meat and packages: \_\_\_\_\_

Consignor: \_\_\_\_\_ Address: \_\_\_\_\_

Consignee: \_\_\_\_\_ Destination: \_\_\_\_\_

Shipping marks: \_\_\_\_\_

 VETERINARY OFFICER AUTHORIZED BY THE  
MINISTRY OF AGRICULTURE AND FISHERIES

Model 3 109958° LV 236.6.66

6955 ORIGINAL

**KINGDOM OF THE NETHERLANDS**  
MINISTRY OF AGRICULTURE AND FISHERIES  
VETERINARY SERVICES

**OFFICIAL MEAT INSPECTION CERTIFICATE FOR PORK AND PORK PRODUCTS**

Place: \_\_\_\_\_ Date: \_\_\_\_\_

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than five (5) degrees F. and not less than twenty (20) days or otherwise treated as specified by the Chief of the Meat Inspection Division, and that said article contains no muscle tissue of pork which has not been treated as herein specified.


Kind of product: \_\_\_\_\_ Number of pieces and packages: \_\_\_\_\_ Weight: \_\_\_\_\_

Identification marks on meat and packages: \_\_\_\_\_

Consignor: \_\_\_\_\_ Address: \_\_\_\_\_

Consignee: \_\_\_\_\_ Destination: \_\_\_\_\_

Shipping marks: \_\_\_\_\_

 VETERINARY OFFICER AUTHORIZED BY THE  
MINISTRY OF AGRICULTURE AND FISHERIES

Model 2 907449b



Ag. L. 190

Department Of Agriculture

No:.....



OFFICIAL MEAT - INSPECTION CERTIFICATE

\_\_\_\_\_, New Zealand  
\_\_\_\_\_ 19\_\_\_\_

I HEREBY certify that the meat <sup>and</sup> <sub>or</sub> meat food-products hereunder described <sup>was</sup> <sub>were</sub> derived from animals subjected to ante- and post-mortem veterinary inspection at the time of slaughter and found to be free from disease and suitable in every way for human consumption, and that <sup>it has not</sup> <sub>they have not</sub> been treated with chemical preservatives or other foreign substances injurious to health.

Consignor:		Consignee:	
Port of Loading:	Vessel:		Port of Destination:
Ultimate Destination:			Slaughtered at:
Marks and Brands	Number of Packages	Description of Goods	lbs. Net Weight

(Revised 1/2/63)

Signature: \_\_\_\_\_  
Veterinary Officer. New Zealand Government.



NICARAGUA



REPUBLICA DE NICARAGUA  
MINISTERIO DE AGRICULTURA Y GANADERIA  
DIRECCION GENERAL DE GANADERIA

CERTIFICADO OFICIAL DE INSPECCION DE CARNES

Lugar..... Fecha.....  
(Place) (Date)

Se certifica por el presente, que la carne o producto comestible de carne aquí descrito, derivan de animales que recibieron inspección veterinaria ante-mortem y post-mortem al tiempo de sacrificarse; y que dicha carne y producto comestible de carne son buenos, sanos y apropiados para el consumo humano; y que no han sido tratados ni contienen ningún preservativo; sustancias colorantes u otras sustancias prohibidas por la Ley y Reglamento para la Industrialización Sanitaria de la Carne de Nicaragua; y que han sido manipulados en forma sanitaria en este país.

This is to certify that the meat or meat food products here in described were derived from animals which received ante-mortem and post-mortem veterinary inspection at the time of slaughter, and that said meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with and do not contain any preservative, coloring matter, or other substance not permitted by the Meat Inspection Act and Regulations of Nicaragua, and have been handled only in a sanitary manner in this country.

ARTICULOS (KIND OF PRODUCT)	NUMERO DE PIEZAS O BULTOS (NUMBER OF PIECES OR PACKAGES)	PESO (WEIGHT)

Marcas de Identificación de la Carne y Bultos.....  
(Identification Marks on Meats and Packages)

Vía: .....

Embarcador ..... Dirección .....  
(Consignor) (Address)

Consignatarios ..... Destino .....  
(Consignee) (Destination)

Marcas de Embarque .....  
(Shipping Marks)

.....  
MEDICO VETERINARIO  
Autorizado por el Ministerio de Agricultura y Ganadería  
(Veterinary Inspector Authorized by the Secretary of Agriculture)

## NORTHERN IRELAND



MINISTRY OF AGRICULTURE FOR NORTHERN IRELAND.

## INSPECTION CERTIFICATE

for use in connection with the

EXPORT OF MEAT AND MEAT PRODUCTS

Place ..... Date .....

I HEREBY CERTIFY that the meat and/or meat food products herein described was/were derived from animals which received ante and post-mortem veterinary inspection at the time of slaughter and are sound, wholesome and fit for human consumption, and have not been treated with and do not contain any prohibited preservative or colouring matter, and that the said meat and/or meat products have been handled only in a sanitary manner in this country.

DescriptionNo. of PackageWeight

Identification Marks .....

Name and Address of Consignor .....

Name and Address of Consignee .....

Conveyed by (Shipping Marks) .....

Signature.....

Certifying Officer.

Official Title .....

-----  
 Secretary,  
 Ministry of Agriculture.

## NORWAY



## KONGERIKET NORGE

## LANDBRUKSDEPARTEMENTET — VETERINÆRDIREKTORATET

Kingdom of Norway  
Ministry of Agriculture  
Veterinary directorate

Königreich Norwegen  
Landwirtschaftsministerium  
Veterinärdirektorat

Royaume Norvège  
Ministère de l'agriculture  
Directoire vétérinaire

Reino Noruega  
El Ministerio de Agricultura  
Dirección de veterinaria

## Opprinnelses- og sunnhetsattest

*Certificate of Origin and Health / Ursprungs- und Gesundheitszeugnis  
Certificat d'origine et de sante / Certificado de origen y de sanidad*

Avsenderens navn og adresse .....

*Name and address of consignor / Name und Anschrift des Absenders / Nom et adresse de l'expéditeur /  
Nombre y dirección del consignante*

Mottakerens navn og adresse .....

*Name and address of consignee / Name und Anschrift des Empfängers / Nom et adresse du destinataire /  
Nombre y dirección del consignatario*

Varens art / *Description of goods / Warenart / Nature de la Marchandise / Naturaleza de la mercadería*

.....  
.....  
.....

Antall kolli .....

*No. of pieces or packages / Stückzahl /  
Nombre des colis / Número de bultos*

Avsenderens fraktmerke .....

*Shipping marks / Versandzeichen / Marques d'expédition /  
Marcas de expedición del consignante*

Bruttovekt .....

*Gross weight / Bruttogewicht / Poids brut / Peso bruto*

Nettovekt .....

*Net weight / Nettogewicht / Poids net / Peso neto*

Veterinærens kontrollmerke på kjøtt og emballasje

*Veterinary Inspection Markings on Packing or Meat*

*Tierärztliche Kontrollzeichen auf der Verpackung bzw. am Fleisch*

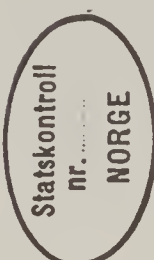
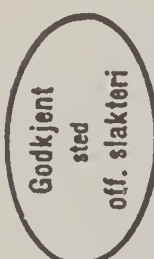
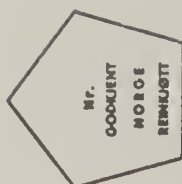
*Marques de contrôle vétérinaire sur l'emballage ou sur la viande*

*Marcas del control veterinario en el embalaje o en la carne*

Undertegnede norske veterinær, autorisert av Landbruksdepartementet, attesterer hermed at ovennevnte kjøtt eller kjøttvarer er av norsk opprinnelse og stammer fra dyr slaktet under offentlig tilsyn og underkastet veterinærundersøkelse umiddelbart før og etter slaktingen og funnet friske og fri for smittsomme sykdommer, at varene er friske og ubetinget godkjent til folkemat, at behandling, framstilling og pakking av varene er foregått under hygienisk forsvarlige forhold og under veterinært tilsyn, at varene ikke er behandlet med eller tilsatt konserveringsmidler, fargestoffer eller andre stoffer som er forbudt etter eksport- eller importlandets bestemmelser og at varene er tillatt omsatt i Norge. Svinekjøtt er triklkontrollert.



## NORWAY



Norske veterinære kontrollmerker:  
 Norwegian Veterinary Inspection Markings:  
 Norwegische tierärztliche Kontrollzeichen:  
 Marques de contrôle vétérinaire norvégiennes:  
 Marcas de control veterinario noruegas:

I, the undersigned veterinary inspector, licensed by the Norwegian Ministry of Agriculture, do hereby certify that the above described shipment of meat or meat food products is of Norwegian origin and is derived exclusively from animals slaughtered under official supervision, and has been subjected to veterinary examination immediately before and after the slaughtering and found fresh and free from contagious diseases, that the commodities at the dispatch are sound and unconditionally fit for human consumption, that the commodities have been dealt with, produced and packed under sanitary conditions and under veterinary supervision, that the commodities have neither been treated with nor contains preservative, colouring matter, or other matter prohibited by Norwegian legislation or by the regulations of the importing country, and that the sale of these commodities for human consumption anywhere in Norway is permitted. Pork has been examined for trichinosis.

Unterzeichneter, vom Norwegischen Landwirtschaftsministerium autorisierter Veterinär, bestätigt hierdurch, dass die oben beschriebene Sendung an Fleisch bzw. Fleischprodukten norwegischen Ursprungs ist und ausschliesslich von Tieren stammt die unter öffentlicher Kontrolle geschlachtet, sowohl vor als nach dem Schlachten einer tierärztlichen Untersuchung unterzogen und dabei als gesund und von ansteckenden Krankheiten frei befunden wurden, dass die Ware beim Versand gesund und als menschliche Nahrung unbedingt geeignet ist, dass Behandlung, Herstellung und Verpackung der Ware unter hygienischen Verhältnissen sowie unter tierärztlicher Beaufsichtigung vorgenommen wurden, dass die Ware weder mit Konservierungs- und Farbstoffen bzw. mit anderen laut norwegischem Gesetz oder laut Gesetz des Einfuhrlandes verbotenen Stoffen behandelt ist, noch derartige Stoffe enthält, und dass der Vertrieb der Ware als menschliche Nahrung überall in Norwegen zulässig ist. Schweinefleisch ist auf Trichinen untersucht.

Je soussigné, vétérinaire public autorisé par le Ministère de L'Agriculture norvégien, certifie par la présente que le lot de viande ou de produits de viande ci-dessus indiqué est d'origine norvégienne et provient exclusivement d'animaux abattus sous contrôle public, soumis à l'examen vétérinaire immédiatement avant et après l'abatage et trouvés sains et exempts de maladies contagieuses; que, au moment de l'expédition, la marchandise est de bonne qualité sanitaire et absolument propre à la consommation et que le traitement, la préparation et l'emballage de la marchandise ont eu lieu dans des conditions hygiéniques sous surveillance vétérinaire; que la marchandise n'a pas été traitée avec, ni ne contient, des matières colorantes ou autres matières dont l'usage est défendu par la législation norvégienne, ou par la législation du pays d'importation, et que la marchandise est admise à être livrée à la consommation partout en Norvège. Trichiniscopes avec résultat négatif.

Yo, el veterinario oficial suscrito, autorizado por El Ministerio de Agricultura certifico por la presente, que la partida de carne o de productos de carne arriba indicada es de origen noruego y que procede exclusivamente de animales carneados bajo control oficial y sometidos a examen veterinario inmediatamente antes de ser carneados, siendo encontrados sanos y libres de enfermedades contagiosas; que la mercadería al ser despachada estaba sana y absolutamente apta para el consumo humano; que la elaboración y el embalaje de la mercadería se han efectuado bajo condiciones higiénicas y vigilancia veterinaria; que la mercadería no ha sido tratada con, ni contiene sustancias de conservación ni colorantes, ni el tratamiento otra sustancia prohibida por la legislación noruega, o por la legislación en el país importador, y que su venta para el consumo humano está permitida en todas partes de Noruega. Cerdo ha sido controlado de triquina.

Sted og dato

Place and date / Ort und Tag / Lieu et date / Lugar y fecha

Tjenestestempel

Official stamp / Amtlicher Stempel /

Cachet / Sello oficial

Autorisert veterinærers underskrift

Signature of Licensed Veterinary Inspector / Unterschrift des autorisierten Veterinärs / Signature d'un médecin vétérinaire autorisé /

Firma del médico veterinario autorizado

PANAMA



REPUBLICA DE PANAMA  
MINISTERIO DE TRABAJO PREVISION SOCIAL Y SALUD PUBLICA  
DEPARTAMENTO DE SALUD PUBLICA  
SECCION VETERINARIA  
CERTIFICADO OFICIAL DE INSPECCION DE CARNES

Lugar ..... Fecha .....  
(Place) (Date)

Se certifica por el presente, que la carne o sus derivados aquí descritos, proceden de animales que recibieron inspección veterinaria de ante-mortem y post-mortem al tiempo de sacrificarse; y que dicha carne y sus derivados son buenos, sanos y apropiados para el consumo humano; y que no han sido tratados ni contienen ningún preservativo; sustancias colorantes u otras sustancias prohibidas por el Decreto Nº 62, de 15 de Enero de 1957, Código Sanitario de Inspección y Vigilancia de Car- nes; y que han sido manipulados en forma sanitaria en este país.

This is to certify that the meat or meat food products here in described were derived from animals which received ante- mortem and post-mortem inspection at the time of slaughter, by a graduate veterinarian, and that said meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with and do not contain any preservative, colorin matter, or other substance not permitted by Decree Number 62 of 15th of January, 1957, Sanitary Code for Inspection and Vigilancia of Meats, and have been handled only in a sanitary manner in this country.

ARTICULOS (Kind of Products)	NUMERO DE PIEZAS O BULTOS (Number of Pieces or Packages)	PESO

Marcas de Identificación de la Carne y Bultos .....  
(Identification Marks on Meats and Packages)

Medio de Transporte .....  
(Carrier)

Embarcador ..... Dirección .....  
(Consigner) (Address)

Consignatario ..... Destino .....  
(Consignee) (Destination)

Marcas de Embarque .....  
(Shipping Marks)

Médico Veterinario

Autorizado por el Ministerio de Trabajo, Previsión Social  
y Salud Pública

D.V.M. Authorized by Ministry of Work, Social Welfare  
and Public Health

## PARAGUAY

N. \_\_\_\_\_

## Ministerio de Agricultura y Ganadería



## DIRECCION DE GANADERIA

CERTIFICADO OFICIAL DE INSPECCION DE CARNES  
OFFICIAL CERTIFICATE OF MEAT INSPECTIONDERIVADOS COMESTIBLES  
EDIBLE PRODUCTS

CERTIFICO que la carne y demás productos alimenticios de origen animal que se indican  
I certify that the meats and other edible products of animal origin which are indicated be-  
a continuación, provienen de bovinos que recibieron inspección Veterinaria ante y post mortem  
low are from cattle which have received veterinary inspection both ante and post mortem on  
al ser sacrificados, y que dicha carne y demás productos alimenticios de origen animal son sa-  
being slaughtered and that the said meats and other edible products of animal origin are sound,  
ros, salubres y en toda forma aptos para alimentación humana, no habiendo sido tratados ni  
healthy and in every way fit for human consumption, not having been treated with, nor  
conteniendo preservativo alguno, materias colorantes u otras sustancias no permitidas por las  
containing any preservatives, colouring matters, or other substances not permitted by the  
disposiciones de la Dirección de Ganadería, que rigen la inspección de carnes y demás  
regulations of the Bureau of Livestock which controls the inspection of meats and other  
productos de origen animal, y han sido elaborados en este país en condiciones sanitarias.  
products of animal origin and have been manufactured in this country under sanitary conditions.

CLASE DE PRODUCTOS CLASS OF PRODUCTS	NUMERO DE PIEZAS NUMBER OF PIECES	PESO - WEIGHT KILOS	
		Gross Bruto	Nett Neto

Sellos de identificación de las carnes y piezas

Seal of identification of the meats and packages:

Remitente - Consignor : Liebig's Extract of Meat Co. Ltd.Dirección - Address : Zeballos Cué

Consignatario - Consignee : \_\_\_\_\_

Dirección - Address : \_\_\_\_\_

Marcas - Shipping marks : \_\_\_\_\_

Vo. B°:

Verified

Fecha - Date \_\_\_\_\_ 196

Dr.

Director de Ganadería  
Director of Cattle Department

Dr.

Inspector de S. Veterinario  
Veterinary InspectorSecretario  
Secretary



## POLAND



POLSKA RZECZPOSPOLITA LUDOWA  
**MINISTERSTWO ROLNICTWA**  
 DEPARTAMENT WETERYNARII

## ZAGRANICZNE URZĘDOWE ŚWIADECTWO BADANIA MIĘSA

Nr .....

Miejscowość .....

Data .....

Zaświadczam niniejszym, że mięso i przetwory mięsne niżej opisane, pochodzą z bydła rogatego, owiec, świń i kóz, poddanych przed ubojem i po uboju badaniu weterynaryjnemu oraz że to mięso i przetwory mięsne są zdrowe, nieszkodliwe i odpowiednie do spożycia przez ludzi, jak również, że do ich wyrobu nie były używane i nie są w nich zawarte żadne środki konserwujące, ani barwniki, ani inne substancje niedozwolone przez przepisy normujące sposób badania mięsa, wydane przez Departament Rolnictwa Stanów Zjednoczonych, jako też, że mięso to oraz przetwory mięsne zostały przygotowane tutaj w kraju w sposób zgodny z wymogami higieny.

Rodzaj przetworów .....

Ilość sztuk lub paczek (skrzyń) .....

Waga .....

Znaki rozpoznawcze na przetworach mięsnych lub paczkach (skrzyniach) .....

Nadawca .....

Odbiorca .....

Adres .....

Znaki transportowe .....

Miejsce przeznaczenia .....

Podpis .....

Nazwisko urzędnika upoważnionego do wystawiania świadectw (badania mięsa i przetworów mięsnych wywożonych do USA)

Tytuł urzędowy .....

## POLAND



POLSKA RZECZPOSPOLITA LUDOWA  
**MINISTERSTWO ROLNICTWA**  
 CENTRALNY ZARZĄD WETERYNARII

**URZĘDOWE ŚWIADECTWO BADANIA MIĘSA WIEPRZOWEGO  
 I PRZETWORÓW WIEPRZOWYCH**

(Na przesyłki morskie do U.S.A. artykułów przyrządzonych do spożycia bez gotowania  
 a zawierających wieprzowinę)

Nr .....

Miejscowość .....

Data ..... 19.....

Zaświadczam niniejszym, że artykuł lub artykuły opisane są przyrządzone do spożycia bez gotowania i zawierają tkanki mięsne wieprzowiny, które w stanie świeżym albo świeżo zapiekowane w solance zostały poddane działaniu temperatury nie wyższej niż 5 °F (pięć) przez czas nie krótszy od dwadzieścia (20) dni lub były poddane jednemu z innych sposobów postępowania, wyszczególnionych przez Szefa Wydziału Inspekcji Mięsnej, jako też, że wymienione artykuły nie zawierają żadnych wieprzowych tkanek mięsnych, które nie były poddane postępowaniu wymienionemu w niniejszym świadectwie.

Rodzaj przetworów .....

Ilość sztuk lub paczek (skrzyń) .....

Waga .....

.....

Znaki rozpoznawcze na przetworach mię-  
 snych lub paczkach .....

Nadawca .....

Adres .....

Odbiorca .....

Miejsce przeznaczenia .....

Znaki transportowe .....

.....

U W A G A : Świadectwo powyższej treści musi być dołączone do każdej przesyłki artykułów żywności przeznaczonych do spożycia bez gotowania (np. letnia kielbasa, włoska i westfalska szynka itp.), które zawierają jakieś tkanki mięsne wieprzowe.

Odbiorca lub jego agent winien świadectwo niniejsze doręczyć Inspektorowi Wydziału Inspekcji Mięsnej w miejscu badania w USA.

Podpis .....  
 (Nazwisko urzędnika upoważnionego do wystawie-  
 nia świadectw badania mięsa i przetworów mię-  
 snych wywożonych do U.S.A.)

Tytuł urzędowy .....

## SCOTLAND

SCOTLAND.

## DEPARTMENT OF HEALTH FOR SCOTLAND.

**CERTIFICATE for use in connection with export of meat and meat products.**

---

Place \_\_\_\_\_ Date \_\_\_\_\_

I hereby certify that the meat and/or meat food products herein described was/were derived from animals which received ante and post mortem veterinary inspection at the time of slaughter and are sound and wholesome and fit for human consumption, and have not been treated with and do not contain any prohibited preservative or colouring matter and that the said meat and/or meat products have been handled only in a sanitary manner in this country,

*Description.**No. of Package.**Weight.*

*Identification Marks* \_\_\_\_\_

*Name and Address of Consignor* \_\_\_\_\_

*Name and Address of Consignee* \_\_\_\_\_

*Conveyed by (Shipping Marks)* \_\_\_\_\_

Signature \_\_\_\_\_  
(Rank or Title)                      *Certifying Officer*

\_\_\_\_\_  
*Secretary,*  
*Department of Health for Scotland.*



## SCOTLAND

SCOTLAND.

## DEPARTMENT OF HEALTH FOR SCOTLAND.

**CERTIFICATE** for use in connection with export to the UNITED STATES OF AMERICA of articles of a kind prepared customarily to be eaten without cooking, which contain muscle tissue of pork.

Place

Date

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork, which when fresh or freshly cured in salt, were subjected to a temperature not higher than 5°F., for not less than 20 days, or otherwise treated as specified by the Chief of the Bureau of Animal Industry of the United States of America and that said article or articles contain no muscle tissue of pork which has not been treated as herein specified.

*Description**No. of Package**Weight.**Identification Marks* .....*Name and Address of Consignor* .....*Name and Address of Consignee* .....*Conveyed by (Shipping Marks)* .....

Signature.....  
 (Rank or Title)                      *Certifying Officer.*

.....  
*Secretary,*  
*Department of Health for Scotland.*

NOTE—A certificate in the above form is required to accompany each consignment of any meat or product of a kind prepared customarily to be eaten without cooking (such as summer sausage, "Italian" and "Westphalia" hams, and the like), which contains any muscle tissue of pork. This certificate is to be delivered by the consignee, or his agent, to the inspector of the Department of Agriculture at the point of inspection in the United States.

Q117 W1 11614/1739 210 2/11 J. & J. G. 0140.

## SPAIN

E S P A Ñ A

MINISTERIO DE LA GOBERNACION  
DIRECCION GENERAL DE SANIDAD

## SERVICIOS DE SANIDAD VETERINARIA

Documento sanitario para la exportación de productos alimenticios de origen animal  
con destino a los Estados Unidos

Nación

Provincia

Municipio

Por el presente certifico que la carne y los productos cárnicos alimenticios que aquí se describen proceden de reses que fueron objeto de inspección veterinaria antes y después de su sacrificio en los Mataderos Oficiales autorizados y que dicha carne y productos cárnicos se hallan en buenas condiciones de salubridad, siendo aptos para el consumo humano, sin que hayan sido tratados ni contengan sustancias preservativas, colorantes o alguna otra prohibida por las disposiciones que regulan la inspección cárnica de los Estados Unidos, Departamento de Agricultura, y que dicha carne y productos cárnicos han sido tratados en este país únicamente por procedimientos sanitarios.

CLASE DE LA MERCANCIA

PIEZAS O NÚMERO  
DE PAQUETES

P E S O



Remitente

Domicilio

Consignatario

Destino

Marcas de identificación sobre carnes y paquetes

Marcas de facturación

a

de

de 195

V.º B.º

EL VETERINARIO DE SANIDAD EXTERIOR,

EL VETERINARIO OFICIAL,

## SWEDEN

Form. C.

Veterinärintyg för köttexport.

## Kingdom of Sweden.

The Royal Veterinary Board of Sweden.



## Foreign official meat-inspection certificate.

Place (avsändningsort)

Date (datum och år)

I hereby certify that the meat or meat food products herein described were derived from animals (cattle, sheep, swine, goats) which received ante-mortem and post-mortem veterinary inspections at the time of slaughter, and that such meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with, and do not contain, any preservative, coloring matter or other substance not permitted by the regulations governing the meat inspection of the United States Department of Agriculture, filed with me, and that said meat and meat food products have been handled only in a sanitary manner in this country.

Undertecknad intygar härmed att nedan angivna köttvaror härröra från djur (nöt-kreatur, får, svin, get), vilka undergått veterinärbesiktning omedelbart före och omedelbart efter slakten, att desamma äro tjänliga till människoföda, att de icke hava behandlats med eller innehålla förhjudna konserveringsmedel, färg- eller andra ämnen, som icke äro tillåtna enligt amerikanska jordbruksdepartementets bestämmelser rörande köttkontroll, samt att desamma här i landet hava behandlats på ett i sanitärt avseende tillfredsställande sätt.

Kind of product.  
(Varuslag)

Number of pieces or  
packages.  
(Antal kolly)

Weight.  
(Vikt)

Identification marks on meats and packages  
(Å kött eller emballage anbragla veterinära kontrollmärken)

Consignor  
(Avsändare)

Adress

Consignee  
(Mottagare)

Destination  
(Adressort)

Shipping marks  
(Avsändarens befraktningsmärken)



(Signature)

Veterinary inspector authorized by the Royal Veterinary Board of Sweden.  
Av Veterinärstyrelsen förordnad besiktningsveterinär.



## SWEDEN

Form. D.

Veterinärintyg för köttexport.  
**KINGDOM OF SWEDEN**  
 The Royal Veterinary Board of Sweden.



Official Meat-inspection certificate for pork  
 and porkproducts.

(For Shipment to United States of articles of a kind prepared customarily to be eaten without cooking, which contain muscle tissue of pork).

Place (avsändningsort) ..... Sweden  
 Country Date (datum och år) .....

19

I hereby certify that the article or articles herein described are of a kind prepared customarily to be eaten without cooking, and contain muscle tissue of pork which, when fresh or freshly cured in salt, were subjected to a temperature not higher than 5°F. for not less than 20 days, or otherwise treated as specified by the Chief of the Bureau of Animal Industry, and that said articles contain no muscle tissue of pork which has not been treated as herein specified

Undertecknad intygar härmed att nedan angivna köttvaror beretts på sådant sätt att de kunna förtäras utan föregående kokning, att de innehålla kött (muskelvävnad) av svin, som i färskt eller lätt saltat skick förvarats under minst 20 dygn vid temperatur av högst 5°F. (-15°C.) eller behandlats på annat sätt i enlighet med av Bureau of Animal Industry givna föreskrifter samt att köttvarorna icke innehålla kött (muskulatur) av svin, som icke behandlats i enlighet med här angivna bestämmelser.

Kind of product.  
 (Varuslag)

Number of pieces or  
 packages.  
 (Antal kolly)

Weight.  
 (Vikt)

Identification marks on meats and packages

(Ä kött eller emballage anbragta veterinära kontrollmärken)

Consignor  
 (Avisändare)

Address

Consignee  
 (Mottogare)

Destination  
 (Adressort)

Shipping marks  
 (Avisändarens befraktningsmärken)



(Signature)

Veterinary inspector authorized by the Royal Veterinary Board of Sweden  
 Av Veterinärstyrelsen förordnad besiktning veterinär.



N. ....

REPUBLICA ORIENTAL DEL URUGUAY  
MINISTERIO DE GANADERIA Y AGRICULTURA  
DIRECCION DE GANADERIA  
Sección: INDUSTRIA ANIMAL

Certificado Oficial de Inspección de Carnes  
MINISTRY OF LIVE STOCK & AGRICULTURE  
BUREAU OF ANIMAL INDUSTRY  
Official Meat — Inspection Certificate

Montevideo, .....

N.º .....

Certifico que la carne y demás productos alimenticios de origen animal que se indican a continuación, provienen de vacunos, ovinos, porcinos o cabríos que recibieron inspección veterinaria ante-mortem y post-mortem al ser sacrificados, y que dicha carne y demás productos alimenticios de origen animal, son sanos, salubres y en toda forma aptos para alimentación humana, no habiendo sido tratados ni conteniendo preservativo alguno, materias colorantes u otras sustancias o permitidas por las disposiciones del Departamento de Agricultura de .....  
que rigen la inspección de carnes, así como que dichas carnes y demás productos de origen animal han sido elaboradas en este País en condiciones sanitarias.

I hereby certify that the meat and food products herein described were derived from cattle, sheep, swine, or goats which received ante-mortem and post-mortem veterinary inspection at the time of slaughter, and that such meat and meat food products are sound healthful wholesome, and otherwise fit for human food and have not been treated with, and do not contain any preservative, coloring matter or other substance not permitted by the regulations of the .....  
Department of Agriculture governing, meat inspection and that said meat and meat food products have been handled only in a sanitary manner in this country.

CLASE DE PRODUCTO KIND OF PRODUCTS	N.º DE PIEZAS Number of Pieces	PESO WEIGHT
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Observaciones: .....

Remarks: .....

Sello de identificación de las carnes y piezas:  
Identification marks on meat and packages:

Remitente ..... Dirección .....  
Consignor ..... Address .....

Consignatario ..... Destino .....  
Consignee ..... Destination .....

Marca de Embarque ..... Vapor .....  
Shipping marks ..... Steamer .....

Firma: .....  
Signature: .....

.....  
Firma del agente o empleado del cargador  
Signature of the agent or employee of the Shipper

Título Oficial: .....  
Official Title: .....

## YUGOSLAVIA



FEDERATIVNA NARODNA REPUBLIKA JUGOSLAVIJA

Savezna uprava za poslove veterinarstva

Obrazac A

## UVERENJE O PREGLEDU MESA

Mesto ..... Datum .....

Narodna Republika .....

Ovim potvrđujem da meso i proizvodi od mesa ovde opisani potiču od goveda, ovaca, svinja ili koza nad kojima su vršeni veterinarski pregledi pre, za vreme i posle klanja, i da su to meso i proizvodi od mesa dobri, zdravi, valjani i u drugom pogledu pogodni za ljudsku ishranu, da nisu obrađeni i da ne sadrže bilo kakvo sredstvo za konzerviranje, materiju za bojenje ili drugu supstancu, koja nije odobrena propisima Ministarstva poljoprivrede SAD o regulisanju pregleda mesa, čijim primerkom raspolazem, kao i da se navedenim mesom i prehranbenim proizvodima od mesa rukovalo u ovoj zemlji samo na higijenski način.

Vrsta proizvoda	Broj komada ili paketa	Težina
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Oznake za raspoznavanje na mesu i paketima .....

Pošiljalac .....

Adresa .....

Primalac .....

Mesto opredelenja .....

Oznaka pošiljke (otpreme) .....

(Potpis) .....

(Mesto pečata)

Veterinarski inspektor



## YUGOSLAVIA



FEDERATIVNA NARODNA REPUBLIKA JUGOSLAVIJA

Savezna uprava za poslove veterinarstva

Obrazac B

## UVERENJE O PREGLEDU MESA

(za svinjsko meso i proizvode od svinjskog mesa)

Mesto .....

Datum .....

Narodna Republika .....

Ovim potvrđujem da proizvod ili proizvodi ovde opisani pripadaju vrsti koja se obično jede bez kuvanja, i sadrže svinjsko mišićno tkivo koje je kao sveže ili sveže usoljeno meso bilo izloženo temperaturi koja nije viša od 5° F u roku od najmanje 20 dana, ili je drugačije tretirano kao što je odredio direktor Odeljenja za pregled mesa Ministarstva poljoprivrede SAD, i da pomenuti proizvodi ne sadrže mišićno tkivo svinja s kojim nije postupljeno kao što je ovde označeno.

Vrsta proizvoda	Broj komada ili paketa	Težina
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Oznake za raspoznavanje na mesu i paketima .....

Pošiljalac .....

Adresa .....

Mesto opredelenja .....

Oznake pošiljke (otpreme) .....

(potpis) .....

(Mesto pečata)


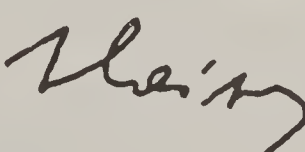
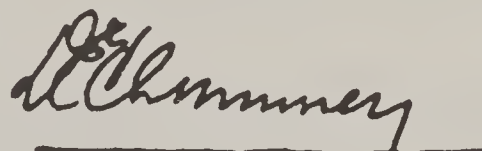


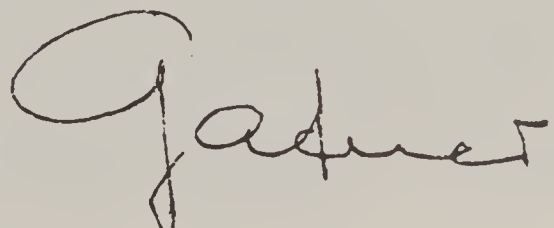

Veterinarski inspektor.

Section 327.39

327.39 Certificates in the English language and exact form prescribed by Section 327.6(a) of the Meat Inspection Regulations are acceptable to cover the importation of meat and meat food products from the countries listed hereafter when signed by authorized officials of the countries whose names and signatures have been approved and published:

Luxemburg - Switzerland - Venezuela

The names and facsimile signatures of such foreign officials follow:

Country and name	Signature
<i>Luxemburg</i>	
Edouard Loutsch.....	
Marcel Theisen.....	
Emile Schummer.....	
<i>Switzerland</i>	
Dr. Andreas Nabholz --	
Dr. Riet Koenz - - - -	
Dr. Peter Gafner - - - -	
<i>Venezuela</i>	
Edward Morgan.....	

## PART 328 - DEFINITIONS AND STANDARDS OF IDENTITY

328.1 The following quoted memorandum clearly indicates the position of the Food and Drug Administration in regard to oleomargarine factories operating under our inspection.

"The Meat Inspection Program maintains inspection under the Meat Inspection Act in establishments manufacturing oleo-margarine using animal fats in whole or in part as an ingredient of oleomargarine if interstate movement is contemplated. This inspection deals with sanitation of the factory and wholesomeness of all raw materials and accuracy of labeling. The Meat Inspection Program inspector exercises supervision over the processing, during the time that the factory is operating, on animal fats and at other times so far as general sanitary conditions go. During periods when vegetable oleomargarine only is being produced there is no processing inspection in the factory by the Meat Inspection Program.

"If the oleomargarine plant while operating exclusively on vegetable product becomes a nuisance and likely to contaminate the meat packing establishment, the Meat Inspection Program takes such action as will bring about correction of the unsatisfactory condition.

"It is unnecessary for Food and Drug to make inspection of oleomargarine factories during periods of time while Meat Inspection Program inspectors are in the plant even though both vegetable and animal oleomargarine are being produced at the same time. Inspection should be made by Food and Drug if there are extended periods of time during which the plant is operating only on vegetable oil and Meat Inspection Program inspectors are not continuously present.

"During your routine coverage of oleomargarine factories, contact the supervisor of Meat Inspection Program in each factory operating under Meat Inspection Program inspection. A mutually agreeable plan should be developed with him which will insure adequate coverage of sanitation of oleomargarine operations of the factory by Meat Inspection Program or Food and Drug Administration or both, with the former supervising the preparation of oleomargarine containing animal fat and the latter being responsible for oleomargarine composed exclusively of vegetable fats or oils."



PART 329 - INSPECTION AND HANDLING OF HORSE MEAT  
AND PRODUCTS THEREOF

329.1 The reference to equine meat used in the Horse Meat Act has been interpreted to apply to horses and is not extended to mules, burros, and the like.

329.2 Although it is clear that horse meat may not be prepared or handled in any establishments in which cattle, sheep, swine, or goats are slaughtered or product thereof is prepared or handled, establishments operating under our horse meat inspection are permitted to receive into such establishments federally inspected meat or meat byproducts derived from cattle, sheep, swine, or goats for the purpose of using such product with horse meat or horse meat product in the preparation of pet food. However, products derived from cattle, sheep, swine, and goats if not used in the preparation of pet food, may not be distributed from the horse meat establishment except in the original closed packages in which they were received. This prohibits the shipment from a horse meat establishment of unpackaged carcasses, quarters, and wholesale cuts derived from cattle, sheep, swine, and goats.

329.3 It has been found very convenient to have an elevated walkway around the horse pens so that animals can readily be observed from a dorsal aspect which easily brings into focus two parts of the horse often affected, namely, polls and withers.

329.4 Sections 309.6 and 309.9 of the Regulations pertain to any and all animals showing symptoms of, or affected with, anthrax, rabies, tetanus, parturient paresis, and railroad sickness.

329.5 It is important to report the identity of animals found on ante-mortem or post-mortem examination to be affected with contagious and communicable diseases by rapid means of communication if the circumstances warrant or on the usual Form ANH-2-11C.

329.6 Horse livers condemned on post-mortem inspection need not be reported.

329.7 Carcasses of horses that have been subjected to hyperimmunizing procedures against such human pathogenic microorganisms as meningococci and streptococci should not be passed for human consumption since these organisms may still be present and viable in the body for varying periods after the final injection of the cultures. Moreover, horses so treated should not be slaughtered for animal food because of the danger of contaminating humans who handle the carcasses or parts of the animals.

329.8 Horses used for the production of gas gangrene, tetanus, or diphtheria antitoxins, although not subject to inoculation with living pathogenic bacteria, are nevertheless considered unsuitable for slaughter for human food. The toxins injected into these animals are very powerful and noxious.

## Section 329.9

329.9 Various methods are employed to kill horses. Some methods result in the contamination of the head and adjacent cervical tissues. A careful inspection should be made of these parts and any contaminated portions must be disposed of according to the findings.

329.10 It is necessary to remove sufficient dorsal bones of the head (frontal, nasal) to expose for inspection the nasal septum and turbinate bones with the adjacent mucous membrane.

329.11 Deposits of melanin are often found in the axillary and medial scapular regions of white or light gray horses. Therefore, these areas in white or light gray horses must be exposed as part of the routine post-mortem inspection. When examinations disclose melanin in these parts, the inspection should extend to the ribs and costal muscles. This does not imply that other horses are not similarly affected because such lesions have been found in dark colored horses.

329.12 A careful examination must be made of the atlantal and supraspinous bursa and surrounding structures in all horse carcasses since these areas are common seats of infections.

329.13 The regular 2½-inch rubber brand may be used to apply the inspection legend and establishment number on the outer cloth covering of horse meat or horse meat product. However, this does not relieve the requirements that such covering plainly and conspicuously bears the inscription "Horse Meat" or "Horse Meat Product," whichever is applicable. The words "Horse Meat" or "Horse Meat Product" should be placed in close proximity to the imprint of the 2½-inch rubber brand wherever it appears on the covering.

329.14 A reading of the Federal Horse Meat Act indicates that it was the intention that horse meat or horse meat product be plainly and conspicuously labeled, marked, branded, or tagged "Horse Meat" or "Horse Meat Product," as the case may be, if interstate movement is involved. This means that all horse meat or horse meat product leaving an official establishment must be so identified. Likely, the intent of the law and regulations is being properly carried out at your Circuit, but we feel that emphasizing its importance is in order. Even though horse meat in chunks or larger pieces or horse meat product is packed in properly marked barrels or other large shipping containers, such horse meat or horse meat product should bear the markings as required by the Act and Regulations, applied either by the official brand or other approved means. An exception may be made on inspected and passed horse meat which moves from one official establishment to another under seal.

329.15 A study of various methods used and investigation with a number of different formulas of green ink gave information which should be helpful in obtaining permanent legible marks of inspection on horse meat. The area where the brand is to be applied must be free of surface water. This may be accomplished by using a scraping device attached to the handle of the brand or allowing the carcass to hang for a short time before branding.

Experience with hot ink brands did not indicate that this type of brand produced a more acceptable mark on the carcasses than cold ink brands. However, on boneless horse meat, such as horse tenderloins, the hot ink brand produced a more acceptable mark. The formula for the green ink that gave the most satisfactory results follows:

	<u>Percent</u>
FD&C Green No. 3 (fast green FCF) -	3½,
Dextrose (corn sugar) -----	3
Water -----	16
Edible shellac -----	2
95 percent ethyl alcohol -----	75

329.16 In addition to the green domestic meat label for horse meat or horse meat food products, the words "Horse Meat" or "Horse Meat Product," as the case may be, should be stenciled in letters at least one inch in height on the barrels or other large shipping containers. Such markings on burlap, paper, or other similar barrel covers are not sufficient.

329.17 Facsimiles of approved foreign horse meat inspection certificates follow.



ARGENTINA



MINISTERIO DE AGRICULTURA Y GANADERIA

DIRECCION GENERAL DE SANIDAD ANIMAL

EXPORTACION A LOS ESTADOS UNIDOS DE NORTE AMERICA  
CERTIFICADO DE INSPECCION DE CARNE EQUINA Y DERIVADOS

LUGAR (Ciudad) (País) FECHA

Por la presente certifico que la carne equina y/o alimentos de carne equina descriptos en la presente fueron obtenidos de equinos que recibieron inspección veterinaria ante-mortem y post-mortem en el momento de su sacrificio y que esta carne equina y/o alimentos de carne equina son sanos, saludables y en cualquier forma aptos para consumo humano y que no han sido tratados y no contienen ningún preservativo, materia colorante u otra substancia no permitida por las reglamentaciones que gobiernan la inspección de carne equina del Departamento de Agricultura de los Estados Unidos, que tengo a mi disposición, y que esta carne equina y/o alimentos de carne equina han sido tratados únicamente de un modo sanitario en este país.

Clase de Producto	Número de Piezas o Bultos	Peso

Marcas de identificación en la carne equina y bultos:

Exportador  
Dirección  
Consignatario  
Destino  
Marcas de embarque

(Firma)  
(Nombre del oficial del gobierno extranjero autorizado para emitir el certificado de inspección para carne equina y/o productos alimenticios de carne equina exportados a los Estados Unidos de Norte América).

(Título oficial)

## CANADA

ORIGINAL to be attached to Export Entry Form B.13 and accompany the shipment to the port of export from Canada where the agent of the transportation company shall hand same to the proper official of the Customs at the port of exit from Canada.

Form P H A 26  
8717-1CX-10-45

DOMINION OF CANADA

No 2669 H.M.

DEPARTMENT OF AGRICULTURE



HEALTH OF ANIMALS DIVISION

## MEAT AND CANNED FOODS

## HORSE MEAT

Place..... Date.....

This is to certify that the meat or meat food products herein described were derived from animals which received ante-mortem and post-mortem veterinary inspection at the time of slaughter, and that said meat and meat food products are sound, healthful, wholesome and otherwise fit for human food, and have not been treated with and do not contain any preservative, colouring matter, or other substance not permitted by the Meat and Canned Foods Act and Regulations, and have been handled only in a sanitary manner in this Country.

HORSE MEAT	Number of Pieces or Packages	WEIGHT

Identification marks on meats and packages.....

Consignor..... Address.....

Consignee..... Destination.....

Shipping marks.....

(Name of Vessel or Car No. and Initials)

Inspector under Meat and Canned Foods Act.

FORMA NUM 19-A


**MEXICO**  
**(Horse Meat)**

Certificado No. \_\_\_\_\_

**REPUBLICA MEXICANA**  
**SECRETARIA DE AGRICULTURA Y GANADERIA**  
**DIRECCION GENERAL DE GANADERIA**

EXPORTACION A: \_\_\_\_\_

**CERTIFICADO**  
**DE INSPECCION DE CARNE DE CABALLO**

\_\_\_\_\_  
(Lugar)\_\_\_\_\_  
(Fecha)

Por el presente se certifica que la Carne de Caballo y los Productos de Carne de Caballo que aquí se detallan, proceden de Caballos que fueron sometidos a Inspección Sanitaria Veterinaria Federal, antes, durante y después de ser sacrificados en los términos de la Ley del 31 de diciembre de 1949, y que dicha Carne de Caballo y Productos alimenticios de Carne de Caballo se encuentran en perfectas condiciones sanitarias, siendo por tanto adecuados para la alimentación humana y que no contienen ni han sido tratados con ningún preservativo, materia colorante u otras sustancias prohibidas por la Ley antes citada y que tal Carne de Caballo y Productos alimenticios de Carne de Caballo, han sido manejados en forma completamente higiénica.

**MARCAS DE IDENTIFICACION EN LA CARNE DE CABALLO**

Nombre del Establecimiento T.I.F. Productor:

Via:

Número de Registro:

Destino:

Remitente:

Consignatario:

Procedencia:

Marcas de Embarque:

Detalle del Cargamento:

\_\_\_\_\_  
(Firma del Funcionario Federal autorizado)\_\_\_\_\_  
(Sello de la Direc. Genl. de Ganaderia)



329.18

A. The import mark of inspection on horse meat and horse meat products should be applied with green ink by means of a hexagonal import brand when applied directly to the horse meat or horse meat product.

B. When applied to the container, the regular 2½-inch import brand should be used with the words "Horse Meat" in letters not less than one-half inch in height appearing adjacent to the brand. The markings on containers may be applied by means of regular marking ink.

1. In addition to the designation on the container, the larger pieces of boneless horse meat must be conspicuously branded "Horse Meat" with green ink. At least one such brand will be required for each 10 pounds of meat. Thus, in a container of 100 pounds net weight, a minimum of 10 brands is to be evident when the meat is defrosted for import inspection.

2. Labeling information on containers of horse meat must be printed. Paper labels attached to cartons are not satisfactory.

3. The applicant for import inspection must show on the Form MI-410, Import Meat and Meat Products Report, the name and address of the ultimate consignee of the shipment. The importer or his agent is, therefore, required to declare the final destination of the horse meat in Section C, Item 8, of the form. The recording of a broker, intermediate agent, or warehouse as the consignee is not satisfactory.

Inspection of horse meat offered for importation will not be undertaken until conditions 2 and 3 of paragraph B of this section are met. Horse meat will be refused entry if condition 1 of paragraph B of this section is not fulfilled.

PART 340 - THE IDENTIFICATION, FOOD INSPECTION, AND CERTIFICATION SERVICES

340.1 The Identification Service provides for maintaining the identity of U. S. Inspected and Passed product (including imported product) as such when it is divided into smaller units at a location other than an official establishment under the supervision of an inspector of this Program. It can be used to apply the marks of inspection to parts removed from a federally inspected carcass, such as beef tenderloins; to parts of a pork loin, a full beef loin, or short loin when divided into two or three parts, etc. It can also be used for the identification of boneless meat, steaks, chops, roasts, and similar size meat cuts taken from fresh carcasses or parts thereof that are identifiable as being federally inspected and passed and so marked and are sound, wholesome, and fit for human food. Sufficient supervision is necessary to carry over to the end product its identification as being U. S. Inspected and Passed and so marked and properly labeled. Also, adequate attention will be paid to the sanitation, equipment, personnel, etc., in the area used for preparing such cuts.

The mark of inspection is to be applied to the meat or to the container by means of special MI brands furnished by the Washington office, and in no case to be applied by any other means. The identification brand should bear the Circuit location. Boxes, packages, etc., will be marked with a 2½-inch brand featuring the establishment number assigned to that particular location. The latter brands are constructed so that the numbers are interchangeable.

The Identification Service may now be used to supervise the preparation of meat for stewing (approximately 1-inch cubes, providing grinding of meat is not involved) and to identify consumer-size packages.

Labeling material for meat or meat food products packaged in consumer-size packages will bear the marks of Federal meat inspection as illustrated in Section 317.2(b) of the Meat Inspection Regulations. An establishment number in the 3000 series will be assigned. The finished label must be approved by the Labels, Standards and Packaging Branch. All labeling material bearing the marks of inspection under the Identification Service must be delivered to the inspector upon being received from the printer. The labeling material will be inventoried and kept under Department lock or seal at the establishment and will be used only under the supervision of an inspector.

Beef carcasses retained because of *Cysticercus bovis* infestation and hog carcasses frozen for certified pork may be held in freezers at other than federally inspected establishments under the Identification Service. This permission is granted when the Officer in Charge, after examining the facilities, is satisfied the retained carcasses can be satisfactorily controlled.

Identification Service may be used to extend services to public warehouses desiring to act as certified storage depots for federally inspected boneless meats. The Identification Service cannot be used for supervising any processing or meat chopping operations. These activities would need to be done in an establishment operating under Federal meat inspection.



The system of control defined for handling of meat in approved warehouses is based on the understanding that the units will remain intact. If cartons from a lot are opened for examination, it must be done under Identification Service in order for the product to maintain its identity as a sealed lot.

Please notify the Processed Meat Inspection Division when establishments have not used their grant of Identification Service for a period of more than one year.

Under such circumstances, the Identification Service will be canceled unless the establishment shows a need for its retention.

340.2 The Certification Service is provided so that we can respond to a request for specific certification for export product which is in addition to the certification contained in our regular export certificate. Examples of the types of certification statements that are to be done under the Service are the additional certification required on Form MI-410-11 for lard exported to Germany and which limits the time of production of the lard and other restrictions and statements concerning the origin of animals so that the meat can be certified as being derived from areas free of Vesicular Exanthema. To make these certification statements which are beyond our normal meat inspection responsibilities requires additional time for which we must be reimbursed -- including all time required to obtain the factual information on which to base certain kinds of certificates, and maintain the identity of the product, as well as the time required to make out the certificate. All subsequent varying statements and certifications must be specifically authorized by the Processed Meat Inspection Division, although the original application will suffice. Any requests with which you are unfamiliar should first be cleared.

340.3 The Food Inspection Service provides for the supervision of the preparation of certain food items containing meat, meat byproducts or meat food products as ingredients, but which are not subject to the Meat Inspection Act. The application for this Service should be accompanied by a brief description of the food article proposed to be prepared under this Service. A complete description of the method of preparation together with the formula of preparation and a percentage list of the ingredients used must be included. It would also be expedient to include a sketch of the label proposed to be used with the food article.

A facility review will be made by the Officer in Charge when instructed to do so after the application has been forwarded to the Processed Meat Inspection Division. Blueprints of the facility will not be required since the operation of the Food Inspection Service will, in most cases, be on an intermittent basis. In making the review, the Officer in Charge will apply the same facility requirements as would be accepted for a similar establishment operating under Federal meat inspection or the Identification Service.

Labeling material for food articles prepared under this Service will bear the marks of Federal meat inspection as illustrated in Section 317.2(b) of the Meat Inspection Regulations. An establishment number in the three thousand series will be assigned upon approval of the application. The finished label must be approved by the Labels, Standards and Packaging Branch. All labeling material bearing the marks of inspection must be delivered to the inspector upon being received from the printer. The labeling material will be



## Section 340.3

inventoried and kept under Department lock or seal at the establishment and will be used only under supervision of the inspector.

The same basic sanitary requirements will apply as are deemed necessary in establishments operating under Federal meat inspection. Equipment for handling the product must meet the same standards of construction. Employees' conduct, practices and product handling techniques will meet our usual standards of sanitation.

Only U. S. Inspected and Passed meat, meat byproducts and meat food products will be used as ingredients of the food article. At the time these products are offered as ingredients they must be sound, wholesome and otherwise acceptable. Other ingredients used in the manufacture of the food article must also meet the same standard for wholesomeness necessary for the manufacture of meat food products in federally inspected establishments. When laboratory sampling of ingredients is necessary, the inspector should request the laboratory to indicate time to be charged on the form as is done for specification examination work. This laboratory time is reimbursable and will be shown on Form C&MS 488. Inspection will be continuous when the inspected food article is being prepared, packaged and labeled. Regular export stamps and certificates may be issued at the applicant's request.

340.4 Application for Identification Service, Certification Service, Food Inspection Service and Specification Examination Service should be made on Form MI-416-6. The application for Identification Service should be accompanied by comments from the Officer in Charge describing the operation involved and the acceptability of the facilities.

340.5 Charges should be made as outlined in C&MS Instruction 425-1 at established billing rates contained in the Federal Register.

Local transportation costs should not be charged in furnishing the service. However, should it be necessary to travel outside the confines of what is normally considered the Circuit, time spent going to and from the point of inspection as well as any per diem, mileage, or other reimbursable expenses should be charged against the one receiving the service.

Each time a plant receives inspection service, the meat inspector shall complete an original and two copies of MI-411, as follows:

- A. Fill in date inspection occurred.
- B. Identify:
  - 1. Circuit, by code and name,
  - 2. Establishment where inspection occurred, by number.
- C. Record service performed, as follows:
  - 1. For Identification Service, record number of pounds of fresh meat inspected.

2. For Food Inspection Service, record the name and number of pounds of each article inspected.

3. For approved warehouse examination or other identification service, identify under "Remarks."

D. Show total number of hours worked for all services performed under Section C above. Include travel time and time required for the preparation of this and other necessary reports.

E. Obtain the signature of the appropriate plant representative.

The meat inspector shall distribute MI-411 as follows:

A. Original to Program Records Unit  
C&MS Meat Inspection Administrative Staff  
211 Stockyards Station  
4101 South Halsted Street  
Chicago, Illinois 60609

B. Duplicate to Officer in Charge, Meat Inspection Circuit.

C. Triplicate should remain in the book. Completed books should be retained by the meat inspector for 30 days and then destroyed.

The Meat Inspection Program is authorized to certify inedible material for export on a reimbursable basis for the Animal Health Division. In order to do this, two forms C&MS 488 must be completed. The first form is used to bill the company for the Animal Health Division. The second form is used to bill the Animal Health Division for the work performed by the Meat Inspection Program.

PART 380 - DESIGNATION OF METHODS

380.1 Conventional humane slaughter electric stunning devices produce animal anesthesia by passing an electric current through the brain of the animal. This is accomplished by placing two electrodes transparietally on the skull of the animal being stunned. Some official establishments have modified the conventional electrical stunning instruments by separating the two electrodes. Using this version, one electrode is placed on the animal's skull and the other on the body over the thoracic, abdominal or perineal region. With proper electrical dosage and uniform placement of the electrodes, desirable anesthesia can be produced. Excess dosage and in some animal species variable electrode placement will electrocute the animal with an immediate stoppage of heart and respiration. Carcasses from animals killed by the electrical charge should not be passed for food.

When electrical stunning instruments are used on livestock in official establishments, it is necessary to determine if anesthesia or death has been produced. Presence of pulse and respiration are basic in making this decision. If upon careful observation of the establishment's procedures, the veterinarian can determine that livestock are stunned properly before shackling and remain so through bleeding, the operations will be reported as in compliance with the Humane Slaughter Act.

If operations in the stunning area are not conducive to detecting the physiological signs of life, recovery tests should be made as follows. Immediately after stunning remove two or more unstuck animals from the conveyor or sticking platform. The stunned animals should not be dropped to the floor or otherwise roughly handled. Abuse of the stunned animal may in itself produce death. In the absence of any stimulation but while under constant inspection observation, the animal should be allowed to regain consciousness. Failure of any animal to recover would indicate that excessive electrical dosage or improperly placed electrodes had been used. When failure of the animal to recover is due to electrical charge or exposure time, the management should be instructed to adjust either or both factors immediately.

Experience has shown that independent and separate placement of electrodes in swine stunning operations should not be left to the operator. Providing death of the animal is not produced, the Division has no objection to placement of one electrode on the head of the animal just in front of the ears with the second electrode being placed over the thoracic region. To prevent misplacement of electrodes by operators in the absence of inspection personnel, the maximum distance between electrodes should be governed with a space limiting device. This may consist of a metal or plastic bar, rod or stout cord that will extend from the animal's head to a location over the thoracic region. Minimum distances between electrodes may be adjusted within the total length of the limiting device. In no instance, however, should it be possible to separate the electrodes for a distance greater than the total length of the limiting device. Continued failure to meet these requirements would be grounds for removal of an animal species from the humane slaughter identification listing. It is not necessary to use the fixed electrode positions while stunning sheep or calves.



Requirements of the Humane Slaughter Law dictate that animals stunned by electrical, chemical, mechanical, gunshot or other methods shall be unconscious before they are shackled, hoisted, thrown, cast or cut.

It has come to our attention some slaughterers are using stunning equipment which is ineffective in producing and maintaining animal unconsciousness throughout the slaughtering process. Under these conditions, carcasses prepared from such animals as a species are not eligible for humane slaughter identification. Veterinarians responsible for determining compliance should assure themselves through regular observations that designated stunning instruments are functioning properly, that they are being correctly applied, and that animals are being satisfactorily stunned. No animal species should be included in the monthly humane slaughter identification report when these requirements of the Humane Slaughter Law are not being regularly and conscientiously fulfilled.

It should be fully understood the existence of humane stunning instruments in any establishment does not automatically constitute humane slaughter for a given species.

PART 381 - IDENTIFICATION OF CARCASSES OF CERTAIN  
HUMANELY SLAUGHTERED LIVESTOCK

381.1 The supervisory veterinary meat inspector located at the slaughtering establishment shall complete MI-403-4 in duplicate not later than the 4th day of each month indicating the method of slaughter the plant has used during the first four days and plans to use during the current month for each species expected to be slaughtered, and send both copies to the Officer in Charge of the appropriate Meat Inspection Circuit.

381.2 If the slaughtering establishment should, at any time during the month, either change the method of slaughter for any species, come into compliance for the first time, or discontinue the humane slaughter program during the month, the supervisory veterinary meat inspector shall complete an additional MI-403-4 in duplicate as soon as the program is modified, send the original directly to the Livestock Slaughter Inspection (LSI) Division, and send the copy to the appropriate Officer in Charge.

381.3 The Officer in Charge shall check each MI-403-4 for accuracy and completeness, resolve any questions with the supervisory veterinary meat inspector, and show that the report has been reviewed and concurred in by signing in the indicated space on MI-403-4. He shall ascertain that all reports for the Circuit have been received from all establishments that have slaughtered during the first four days of the month and complete MI-403-4 for any establishment that has not slaughtered during the first four days of the month, basing the report on slaughter methods used during the last previous operation. He shall send the originals to the appropriate District Director not later than the 10th day of the month, and retain one copy of each for file.

381.4 Upon receipt of the copy of MI-403-4 showing that humane slaughter has been changed, the Officer in Charge shall review the MI-403-4 and resolve any questions with the supervisory veterinary meat inspector. He shall notify the LSI Division if any change should be made in the original of the MI-403-4. Whenever inspection is suspended or withdrawn from an official establishment, the Officer in Charge shall submit a MI-403-4 to the LSI Division with the notation of the date of suspension or withdrawal. No further report is necessary until the suspension is revoked.

381.5 The District Director shall check to make sure that a properly signed and completed form is received for each establishment in the District. As soon as all reports are received, he shall send them to the LSI Division for receipt not later than the 15th of the month.





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